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ABSTRACT

A study was conducted to develop and implement a one- and five-year student and employer-based follow-up study of secondary vocational education programs in Tennessee. Questionnaires were sent to 1,013 students who graduated in 1975-76 and to 92 of their employers. It was found that (1) students in both groups rated the Tennessee vocational program very highly overall; (2) a high percentage of those enrolled in vocational programs complete the program; (3) unemployment was higher for the 1975-76 group than for the earlier one; (4) most program graduates pursued further training; (5) employers rated the state program above average; (6) employers did not know about initial job placement services; (7) employers were satisfied with the cooperation of vocational instructors; and (8) employers felt that many employees need additional training and improved working skills in the areas of unsupervised work and communication. Specific recommendations were made to improve the present vocational program. To comply with federal requirements for reporting vocational education data, modifications were later made in the follow-up survey model that was developed in this study. (The appendixes contain sample questionnaires and the revised employer survey form to comply with the federal guidelines.) (ELG)

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A Study to Develop and Implement a One and Five-Year Student and Employer Based Follow-up Study of Secondary Vocational Education Programs

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Prepared for
The Office of Vocational-Technical Education
Tennessee State Department of Education

Final Report
September 1, 1977 - June 30, 1978

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Chapter 1

OVERVIEW

Significance of the Study

Today much emphasis is being placed on educational accountability. Not only are teachers accountable, but schools are accountable for their products. As needs change in the academic community and in other occupational settings, adjustments are necessary in educational programs to make them relevant and beneficial to students. Determining how well a program has prepared its graduates for the work they do, their satisfaction with that preparation, and their employer's satisfaction with their work, is an effective way of assessing the merit of an educational program and obtaining suggestions for program improvement.

This study is significant in that information will be provided that should be valuable: (1) to program planners for secondary vocational programs within the state of Tennessee in the evaluation and improvement of vocational programs, (2) to employers of secondary vocational graduates in obtaining better employees, (3) to future graduates in obtaining a more relevant and useful education, and (4) to educators in general who may apply some of the procedures or findings to other schools and/or other programs.

Statement of the Problem

Since the passage of the Smith-Hughes Act of 1917, Tennessee has been involved in the process of developing, implementing, and improving vocational education programs for secondary students. The 1976 Vocational Amendments state that "each state shall evaluate by using data collected, wherever possible, by statistically valid sampling techniques, each such program within the state which purports to impart entry level job skills according to the extent to which program completers and leavers find employment in occupations related to their training and are considered by their employers to be well-trained and prepared for employment."[1]

The purpose of this study was to develop and implement a one and five-year student and employer based follow-up study of secondary vocational education programs in Tennessee. Specifically, as a result of the study, model questionnaires for vocational follow-up which are compatible with the existing Management Information System were developed, a model for a one and five-year student-based and employer-based follow-up study for secondary vocational programs was designed, and completed follow-up data for 1971-1972 and 1975-1976 secondary vocational program graduates was collected and analyzed.

Statement of Objectives

The objectives of this study were to:

1. Identify the graduates of Tennessee's secondary vocational programs for the school years 1971-1972 and 1975-1976.
2. Identify employers of Tennessee's secondary vocational programs for the school years 1971-1972 and 1975-1976.
3. Survey previously completed state and national follow-up activities for relevancy to the Tennessee system.

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[1] U.S., Congressional Record, 94th Cong., 2nd Sess. (1976), CXXII, No. 69, H4202-H4203.

4. Conduct periodic meetings with the State Research and Development Committee as questionnaires and techniques are developed so that compatibility was insured.

5. Develop a model student-based questionnaire that was compatible with existing Tennessee Management Information System techniques.

6. Develop a model employer-based questionnaire that was compatible with existing Tennessee Management Information System techniques.

7. Test student-based questionnaire for validity and reliability.

8. Test employer-based questionnaire for validity and reliability.

9. Develop a systematic sampling plan to select a sample from the 1971-1972 and 1975-1976 secondary vocational graduates.

10. Select a sample of employers of the 1971-1972 and 1975-1976 secondary vocational graduates.

11. Develop an appropriate computer program in consultation with state department staff for analysis and printing of data.

12. Obtain final approval of questionnaires, sampling plans and data analysis procedures from the State Research and Development Committee.

13. Collect data through initial mail-outs, follow-up mailing and telephone calls.

14. Analyze data.

15. Write-up findings and recommendations.

16. Prepare data for dissemination.

Statement of Questions

This study attempted to answer the following questions:

1. Who were the graduates of Tennessee's secondary vocational program for the school years 1971-1972 and 1975-1976?

2. What vocational experiences have the graduates had since graduation?
3. What are the current positions and responsibilities of graduates?
4. What part of their training do the graduates feel helped prepare them for their responsibilities?
5. What components do graduates feel were missing from their vocational training based on their experiences since graduation?
6. What are the attitudes of the graduates toward the basic elements of their program?
7. What services, if any, do the graduates feel should be provided by the school after graduation?
8. Who are the employers of graduates of Tennessee's secondary vocational program for the school years 1971-72 and 1975-76?
9. How well do the employers feel that the graduates are performing assigned tasks?
10. What are the attitudes of the employers toward the graduates?
11. What are the attitudes of the employers toward the adequacy and effectiveness of the vocational program?
12. What services, if any, do employers feel should be provided by schools after graduation?
13. What are the implications of the evaluative data for program revision?

Chapter 2

METHODOLOGY

Instrument

Two questionnaires were developed to be utilized in this study. The first instrument was a student questionnaire (Appendix A). The questionnaire was initially administered to a test group of former Tennessee secondary vocational education students. The questionnaire was also reviewed by a jury of experts. A listing of the jury of experts is shown in Appendix B. The criteria used in selecting the jury were: (1) employed in vocational education programs, (2) experience in the evaluation of vocational education programs, (3) experience in administering follow-up studies, and (4) knowledge of instrument construction for follow-up studies. Minor revisions were made as suggested by these groups. After approval by the Research and Development Committee, Division of Vocational Education, the questionnaire was printed by the National Computer Systems.

The second instrument, the employer questionnaire, was similarly developed (Appendix C). A listing of the jury of experts is shown in Appendix D. This form was also printed by the National Computer Service. Both instruments were printed in a format that could be scanned by the Tennessee State Testing and Evaluation Center-University of Tennessee, Knoxville.

Sample

After careful study of sampling techniques and characteristics, it was determined that a sample should be selected representative of the population. In the sample any person exiting the program must have an equal chance of being selected as a participant in the study. In addition, the selection of any one individual is in no way tied to the selection of any other.

The computer print-out of 1975-1976 seniors in vocational programs is listed by U.S.O.E. code numbers for occupational areas. Consequently, stratification could have been used for this group. The computer print-out of 1971-1972 seniors in vocational programs does not list by U.S.O.E. code numbers for occupational areas. Stratification of this group would be most difficult. After study by this research staff, it was determined that randomization would be utilized for both groups. Thus, the same procedure could be used for drawing the two samples. The computer program selected to draw the samples insures that each person in the population has an equal chance of being selected.

To demonstrate that randomization yields a representative sample, Table 2.1 shows a breakdown of the enrollment of seniors in vocational programs in 1975-1976 by service area. The sample drawn is shown with the number for each service area listed. A comparison of the enrollment in the service areas and the sample drawn reveals that the percentages are similar. Two areas, Trade and Industry and Office Occupations differ slightly. Trade and Industry had 19.3 percent of the total senior enrollment and through random selection 26.5 percent of the sample were enrolled in that area. Office Occupations represented 13.4 percent of the senior enrollment while 9.4 percent of the sample drawn were enrolled in that area.

Sample size is of prime importance in that an adequate sample must be taken to insure representative results. To determine this sample size, the following formula suggested by Nunnery and Kimbrough

COMPARISON OF SENIOR ENROLLMENT IN VOCATIONAL PROGRAMS AND NUMBER IN SAMPLE FOR EACH SERVICE AREA

Service Areas	Total Number in Service Area	Percent of Total Population	Sample Number in each Service Area	Percent of Total Number in Service Area
1. Agriculture	3,144	9.7	98	9.4
2. Distributive	3,808	11.7	132	12.7
3. Health Occupations	538	1.6	17	1.6
4. Home Economics	8,916	27.5	244	23.6
5. Industrial Arts	3,042	9.4	97	9.3
6. Office Occupations	4,353	13.4	98	9.4
7. Technical Education	161	.5	4	.4
8. Trade and Industry	6,250	19.3	273	26.5
9. Special Programs	1,722	5.3	56	5.4
10. Other	378	1.1	13	1.2
Totals	32,312	99.5	1,032	99.5

TABLE 2.1

was utilized:[1]

$$n = \frac{[X^2 N\emptyset\ (1-\emptyset)]}{[d^2(N-1) + X^2\emptyset\ (1-\emptyset)]}$$

Where:

X^2 = table value of chi-square for one degree of freedom and the desired confidence interval. (95 percent is the confidence interval and the table value of X^2 is 3.84)

N = population size

$\emptyset$ = population proportion desired to estimate (0.5 yields maximum size)

d = degree of accuracy expressed as a proportion, e.g. 0.03 where ± 3% is the tolerated error

n = required sample size

As an example, if the population size is 30,000 the sample size will be determined as:

$$n = \frac{[X^2 N\emptyset\ (1-\emptyset)]}{[d^2(N-1) + X^2\emptyset\ (1-\emptyset)]}$$

$$n = \frac{3.84 \times 30{,}000 \times .5 \times .5}{(.03)^2\ (29{,}999) + 3.84 \times .5 \times .5}$$

$$n = 1{,}030 \text{ cases}$$

This formula was utilized to determine the sample size for the 1971-1972 and 1975-1976 population.

The sample was chosen through the use of random numbers generated by an IBM 1130 computer. The name of the program used is SUBROUTINE RANDU, which is part of the IMB Scientific Subroutine Package. The computer generated 1600 numbers per sample year to allow for duplicate numbers. The 1971-1972 and 1975-1976 lists of twelfth grade vocational students were numbered giving each student a separate number. The total number of former students on the 1971-1972 list was 20,039. Using the formula already discussed, a sample size of 1,013 was chosen. For the 1975-1976 list, the sample size was 1,032 based on a total of 32,312.

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[1] Michael Y. Nunnery and Ralph B. Kimbrough, Politics, Power, Polls, and School Elections, (Berkeley: McCutchan Publishing Co., 1971), p. 72.

After selecting a student's name using the table of random numbers, the address was checked against a list of persons holding a Tennessee driver's license. This list was provided by the Tennessee Department of Public Safety. Of the names drawn from the years 1971-1972, approximately 60 per cent of the student's addresses could not be confirmed using this method. In the sample drawn from the 1975-1976 list, there were only about 30 per cent of the addresses that could not be confirmed.

It was felt that the 1971-1972 unconfirmed addresses had to be, if possible, updated. To see if this could be accomplished, a sample of 25 unverified names was sent a letter (Appendix E) with a return prepaid postcard (Appendix F). The letter explained the project and requested a change of address. The returns from this mailing indicated a need to send the same letter and card to all those names on the 1971-1972 sample whose addresses could not be confirmed.

The student survey instrument was mailed to each person drawn in the sample for 1971-1972 and 1975-1976, accompanied by a cover letter signed by the Assistant Commissioner for Vocational Education (Appendix G). Ten days after the initial mailing a reminder card (Appendix H) was sent to non-respondents. Two weeks after this reminder a second instrument was mailed to the non-respondents. An attempt was made to contact all non-respondents by telephone. Telephone calls were made daily during a four week period in May and June. For results of this follow-up see Appendix I.

The student survey solicited names and addresses of their employers (Appendix J). Employer instruments were mailed to each company identified, accompanied by a cover letter signed by the Assistant Commissioner for Vocational Education (Appendix K). Ten days after the employer instrument was mailed a reminder card (Appendix L) was sent to non-respondents. Two weeks after this mailing a second instrument was mailed to the non-respondents. After all reminders, a telephone follow-up was attempted to enhance the return rate. The results of the phone follow-up is shown in Appendix M.

For this project, the Management Plan is shown in Appendix N.

Chapter 3

RESULTS OF THE STUDY

Results of 1971-1972 Student Follow-Up

There were 1,013 former students included in the sample population for 1971-1972. Of that number, usable responses were received from 102 for a response rate of 10.1 per cent. However, the actual return numbered 109 for a total response rate of 10.7 per cent. The difference between the usable returns and the actual returns is accounted for in that some were returned by relatives of former students who were deceased and some were received after the cut-off date of June 13, 1978. The following data are based on the usable returns.

I. General Information

Part I of the Tennessee Vocational Student Survey pertains to general information. When asked if the vocational program was completed, 75.5 per cent stated yes while 23.5 per cent said they had not. There was 1 per cent who did not respond. This is shown in Table 3.1.

TABLE 3.1

RESPONDENTS COMPLETING THE VOCATIONAL PROGRAM

Response Choice	Frequency	Per Cent
Yes	77	75.5
No	24	23.5
No Response	1	1.0
Total	102	100.0

Table 3.2 lists the program area within which the student was enrolled.

TABLE 3.2

VOCATIONAL PROGRAM AREA ENROLLMENT

Response Choice	Frequency	Per Cent
Vocational Agriculture	17	16.7
Distributive Education	9	8.3
Health Education	10	9.8
Home Economics Education	10	9.8
Industrial Arts Education	6	5.9
Office or Business Education	20	19.6
Technical Education	10	9.8
Trade and Industrial Education	28	27.5
Total	110*	107.9

*Eight respondents were enrolled in two programs.

Trade and Industrial exhibits the highest percentage (27.5) while Industrial Arts shows the lowest with 5.9 per cent.

Of those not completing their vocational program, 43.5 per cent said they completed under 25 per cent of the program, 4.3 per cent completed 26-50 per cent, while 21.7 per cent completed 51-75 per cent. Seven (7) persons, or 30.4 per cent, completed over 75 per cent of their vocational program. This is shown in Table 3.3.

TABLE 3.3

PERCENTAGE OF PROGRAM COMPLETED BY THOSE WHO DID NOT FINISH THE PROGRAM

Response Choice	Frequency	Per Cent
Under 25	10	43.5
26 - 50	1	4.3
51 - 75	5	21.7
Over 75	7	30.4
Total	23	100.0

The participants were asked what further educational training they have taken part in. These responses are shown in Table 3.4.

TABLE 3.4

ADDITIONAL EDUCATIONAL TRAINING SINCE ATTENDING THE VOCATIONAL PROGRAM

Response Choice	Frequency	Per Cent*
On-The-Job Training (employer sponsored)	43	42.2
Public Area Vocational School Programs	5	4.9
Private Vocational Programs	5	4.9
University, College and/or Junior College Programs	25	24.5
Apprenticeship	4	3.9
Specialized Occupational Military Training	7	6.9
None	30	29.4
Other	7	6.9
Total	126	123.6

*Per cent is based on 102 respondents.

Over 42 per cent of the respondents had on-the-job training, while approximately one-fourth had continued their training at the university, college, or junior college level. Approximately 30 per cent had not participated in any type of training since their vocational program. Some persons had received more than one type of further educational training. Other responses included pharmacy, lawn mower repair, M.S. animal science, U.S. Army, photography, Tennessee Fireman's School, and emergency medical technician.

When asked if additional training was related to previous vocational training, over 40 per cent stated yes, while slightly less than 40 per cent stated it was not. This is shown in Table 3.5

TABLE 3.5

ADDITIONAL TRAINING RELATED TO PREVIOUS
VOCATIONAL TRAINING

Response Choice	Frequency	Per Cent
Yes	41	40.2
No	40	39.2
No Response	21	20.6
Total	102	100.0

Of the respondents, 16.7 per cent were furthering their education full-time while 11.8 per cent were furthering their education part-time. There were 71.6 per cent no responses to the question.

II. Vocational Experience Since Leaving High School

Table 3.6 lists the number of jobs the former students have had since leaving the vocational program. Fifty-one per cent had one or two jobs since leaving the vocational program, while approximately 20 per cent had three jobs.

TABLE 3.6

NUMBER OF JOBS SINCE LEAVING
VOCATIONAL PROGRAM

Response Choice (Number of jobs)	Frequency	Per Cent
One	26	25.5
Two	26	25.5
Three	20	19.6
Four	8	7.8
Five	5	4.9
Six or More	8	7.8
No Response	9	8.8
Total	102	100.0

Concerning unemployment, 7.8 per cent of the respondents were unemployed. Approximately 15 per cent stated they were unavailable for employment. Several reasons for employment unavailability were listed. These are shown in Table 3.7.

TABLE 3.7

REASONS FOR EMPLOYMENT UNAVAILABILITY

Response Choice (Reason)	Frequency	Per Cent
Military	5	33.3
Further Training or Education	5	33.3
Illness	1	6.7
Housewife	1	6.7
Pregnancy	1	6.7
Other	2	13.3
Total	15	100.0

The "Other" category was comprised of persons who said they were self-employed and one who said he was unavailable for employment because of paternal responsibility.

The participants were asked how many hours per week they usually work on their present job and the number of months employed at their present job. These results are shown in Table 3.8 and Table 3.9. Almost half work more than 40 hours per week, while 34.3 per cent work 35-40 hours per week. One fourth have had their present job 12 months or less, while 27 per cent have held their present job over four years.

TABLE 3.8

HOURS PER WEEK USUALLY WORKED ON PRESENT JOB

Response Choice (Hours)	Frequency	Per Cent
Less than 20	3	2.9
20 - 29	3	2.9
30 - 34	1	1.0
35 - 40	35	34.3
More than 40	49	48.0
No Response	11	10.8
Total	102	100.0

TABLE 3.9

NUMBER OF MONTHS EMPLOYED AT PRESENT JOB

Response Choice (Months)	Frequency	Per Cent
0 - 12	25	24.5
13 - 24	22	21.6
25 - 36	10	9.8
37 - 48	7	6.9
Over 48	27	26.5
No Response	11	10.7
Total	102	100.0

The former students were asked two questions pertaining to hourly wage. Table 3.10 lists responses to the hourly wage on their first full-time job. Over 36 per cent began at $2.01 to $3.00 per hour. Approximately 30 per cent began at $2.00 or less per hour. Approximately 12 per cent started at $3.01 to $4.00 per hour.

TABLE 3.10

STARTING HOURLY WAGE ON FIRST FULL-TIME JOB

Response Choice (Wage)	Frequency	Per Cent
$2.00 or less per hour	30	29.4
$2.01 - $3.00 per hour	37	36.3
$3.01 - $4.00 per hour	12	11.8
$4.01 - $5.00 per hour	5	4.9
$5.01 - $6.00 per hour	3	2.9
$6.01 or more per hour	2	2.0
No Response	13	12.7
Total	102	100.0

When asked the highest hourly wage earned, over 26 per cent earned $3.01 - $4.00 per hour, 20.6 per cent earned $4.01 - $5.00 per hour, while 17.6 per cent earned $5.01 - $6.00 per hour. This is shown in Table 3.11.

TABLE 3.11

HIGHEST HOURLY WAGE EARNED

Response Choice (Wage)	Frequency	Per Cent
$2.00 or less per hour	1	1.0
$2.01 - $3.00 per hour	11	10.8
$3.01 - $4.00 per hour	27	26.5
$4.01 - $5.00 per hour	21	20.6
$5.01 - $6.00 per hour	18	17.6
$6.01 or more per hour	9	8.8
No Response	15	14.7
Total	102	100.0

III. Attitudes Toward Vocational Program

Part III of the survey form concerned attitudes toward the participant's vocational program. When asked how closely their present job relates to the vocational training they received, 21.6 per cent stated they were employed in the occupation for which they were trained. Approximately 20 per cent were employed at a related occupation, while 44.1 per cent were employed in a completely different occupation. This is shown in Table 3.12.

TABLE 3.12

RELATIONSHIP OF PRESENT JOB TO THE VOCATIONAL TRAINING RECEIVED

Response Choice	Frequency	Per Cent
Employed in Occupation for Which Trained	22	21.6
Employed in Related Occupation	20	19.6
Employed in Completely Different Occupation	45	44.1
No Response	15	14.7
Total	102	100.0

The participants were asked how often, on their present job, they use the knowledge and skill acquired from their vocational training. Fifty per cent stated they frequently or occasionally used the knowledge and skill acquired, 17.6 per cent said they seldom used the knowledge and skill acquired, while 18.6 per cent stated they never used the knowledge and skill acquired in their vocational training. These results are shown in Table 3.13.

TABLE 3.13

UTILIZATION OF KNOWLEDGE AND SKILL ACQUIRED FROM VOCATIONAL TRAINING

Response Choice	Frequency	Per Cent
Frequently	32	31.4
Occasionally	19	18.6
Seldom	18	17.6
Never	19	18.6
No response	14	13.7
Total	102	100.0

Table 3.14 lists the responses to the question, "Considering all of your occupational experiences since leaving school, how well do you feel your vocational program prepared you?" Over 78 per cent said they were either well prepared or satisfactorily prepared. Only 8.8 per cent stated they were inadequately prepared.

TABLE 3.14

HOW WELL VOCATIONAL PROGRAM PREPARED STUDENT FOR EMPLOYMENT

Response Choice	Frequency	Per Cent
Well Prepared	30	29.4
Satisfactorily Prepared	50	49.0
Inadequately Prepared	9	8.8
No Response	13	12.7
Total	102	100.0

TABLE 3.15

KNOWLEDGE VOCATIONAL INSTRUCTORS POSSESSED ABOUT SUBJECT MATTER

Response Choice	Frequency	Per Cent
Excellent	32	31.4
Above Average	27	26.5
Average	29	28.4
Below Average	3	2.9
No Response	11	10.8
Total	102	100.0

Table 3.15 lists participants' opinion of the subject matter knowledge possessed by their vocational instructor. Only 2.9 per cent felt their instructor was below average. Over 86 per cent felt their instructor was average, above average or excellent.

Responses to the former students' rating of their vocational instruction being up-to-date in their field is shown in Table 3.16. Less than eight per cent felt the instruction was below average.

TABLE 3.16

EXTENT VOCATIONAL INSTRUCTION WAS UP-TO-DATE IN FIELD TAUGHT

Response Choice	Frequency	Per Cent
Excellent	19	18.6
Above Average	27	26.5
Average	35	34.3
Below Average	8	7.8
No Response	13	12.7
Total	102	100.0

Table 3.17 lists the respondents reactions to the interest instructors have shown in the former students' work and progress since leaving school. Approximately 25 per cent felt the interest was below average or poor. Over 60 per cent stated the interest expressed was excellent, above average, or average.

TABLE 3.17

INSTRUCTORS INTEREST IN VOCATIONAL GRADUATES WORK AND PROGRESS SINCE LEAVING SCHOOL

Response Choice (Rating)	Frequency	Per Cent
Excellent	17	16.7
Above Average	14	13.7
Average	31	30.4
Below Average	7	6.9
Poor	19	18.6
No Response	14	13.7
Total	102	100.0

The former vocational students were asked to rate the extent the vocational program prepared them to work with supervisors and fellow workers. Over 32 per cent stated they received adequate preparation, while 18.6 per cent received excellent preparation. Only 11.8 per cent stated they received no preparation. These responses are shown in Table 3.18

The survey participants were asked to rate the vocational school facilities and equipment as compared to the facilities and equipment used on their present job. These responses are shown in Table 3.19. Approximately 42 per cent stated they were similar, while 19.6 per cent stated they were superior. Only 12.7 per cent stated that they were inferior.

TABLE 3.18

PREPARATION TO WORK WITH SUPERVISORS AND FELLOW WORKERS

Response Choice	Frequency	Per Cent
Excellent Preparation	19	18.6
Adequate Preparation	13	32.4
Some Preparation	24	23.5
No Preparation	12	11.8
No Response	14	13.7
Total	102	100.0

TABLE 3.19

COMPARISON OF VOCATIONAL SCHOOL FACILITIES AND EQUIPMENT AND THOSE USED ON PRESENT JOB

Response Choice (Rating)	Frequency	Per Cent
Superior to Those on Job	20	19.6
Similar to Those on Job	43	42.2
Inferior to Those on Job	13	12.7
No Response	26	25.5
Total	102	100.0

The former students were asked if they have used the job placement services provided by the school since receiving their first full-time job. Only 9.8 per cent stated they have, while 73.5 said they have not. There were 16.7 per cent non respondents. These results are shown in Table 3.20.

TABLE 3.20

USE OF JOB PLACEMENT SERVICES PROVIDED BY SCHOOL SINCE RECEIVING FIRST FULL-TIME JOB

Response Choice	Frequency	Per Cent
Yes	10	9.8
No	75	73.5
No Response	17	16.7
Total	102	100.0

TABLE 3.21

RECOMMEND VOCATIONAL PROGRAM TO OTHERS

Response Choice	Frequency	Per Cent
Yes	83	81.4
No	7	6.8
No Response	12	11.8
Total	102	100.0

RATING OF VOCATIONAL PROGRAM

Item	Frequency (Percentage)						
	Excellent	Good	Fair	Poor	Missing	No Response	Total Per Cent
Quality of Instruction	28(27.5)	45(44.1)	13(12.7)	3(2.9)	2(2.0)	11(10.8)	100.0
Teacher Interest	28(27.5)	50(49.0)	8(7.8)	4(3.9)	3(2.9)	9(8.8)	100.0
Instructional Materials & Aids	21(20.6)	35(34.3)	27(26.5)	6(5.9)	3(2.9)	10(9.8)	100.0
Vocational Counseling	14(13.7)	33(32.4)	24(23.5)	11(10.8)	9(8.8)	11(10.8)	100.0
Preparation for Job Interview	10(9.8)	26(25.5)	20(19.6)	6(5.9)	26(25.5)	14(13.7)	100.0
Job Placement Services	6(5.9)	17(16.7)	16(15.7)	11(10.8)	38(37.3)	14(13.7)	100.0
Practical Application of Training to Job	13(12.7)	28(27.5)	29(28.4)	5(4.9)	14(13.7)	13(12.7)	100.0
Reputation in Community	15(14.7)	41(40.2)	24(23.5)	1(1.0)	10(9.8)	11(10.8)	100.0
Vocational Shop Facilities	18(17.6)	36(35.3)	16(15.7)	8(7.8)	14(13.7)	10(9.8)	100.0
Providing Enployable Skills	20(19.6)	36(35.3)	24(23.5)	6(5.9)	6(5.9)	10(9.8)	100.0
Specialized Units of Instruction	7(6.9)	33(32.4)	31(30.4)	9(8.8)	11(10.8)	11(10.8)	100.0
Study, Library, Learning Resources	11(10.8)	29(28.4)	24(23.5)	9(8.8)	17(16.7)	12(11.8)	100.0
Counseling facilities & Persons	12(11.8)	31(30.4)	24(23.5)	11(10.8)	13(12.7)	11(10.8)	100.0
Help in Obtaining Financial Assistance	5(4.9)	12(11.8)	14(13.7)	8(7.8)	47(46.1)	16(15.7)	100.0
Youth Organizations	8(7.8)	29(28.4)	15(14.7)	6(5.9)	31(30.4)	13(12.7)	100.0

TABLE 2.22

The respondents were asked "would you recommend this vocational program to others?" Over 81 per cent said yes, while only 6.9 per cent stated no they would not. There were 11.8 no responses. This is shown in Table 3.21.

The former students were asked to rate several items in the vocational program. Quality of instruction, teacher interest, instructional materials and aids, reputation in community, providing employable skills, and vocational shop facilities received the highest excellent and good ratings. Some items showed a relatively high "missing" or "poor" rating. Among these were help in obtaining financial assistance, job placement services, youth organizations, and preparation for job interview. These are shown in Table 3.22.

IV. Services Provided by Vocational Program After Graduation

Part IV of the survey asked the former students what services they felt should be provided by the vocational program after graduation. Table 3.23 lists the responses and the per cent of each.

TABLE 3.23

SERVICES PROVIDED BY VOCATIONAL PROGRAM
AFTER GRADUATION

Response Choice (Service)	Frequency	Per Cent*
Continuous Job Placement Services	56	54.9
Career Information	56	54.9
Continuing Vocational Education	35	34.3
Vocational Program Newsletter	31	30.4
No Continuing Services	7	6.9

*Shown as per cent of 102 responses.

Results of 1975-1976 Student Follow-Up

There were 1,032 former students included in the sample population for 1975-1976. Of that number, usable responses were received from 132 for a response rate of 12.7 per cent. However, the actual return numbered 138 for a total response rate of 13.4 per cent. The difference between the usable returns and the actual returns is accounted for in that some were returned by relatives of former students who were deceased and some were received after the cut-off date of June 13, 1978. The following data are based on the usable returns.

I. General Information

As shown in Table 3.24, 81.1 per cent of the students indicated that they had completed the program, 15.9 per cent indicated they had not completed the program and 3 per cent did not respond to the question.

TABLE 3.24

RESPONDENTS COMPLETING THE VOCATIONAL PROGRAM

Response Choice	Frequency	Per Cent
Yes	107	81.1
No	21	15.9
No Response	4	3.0
Total	132	100.0

In regard to the vocational program area(s) in which the former students were enrolled, Table 3.25 shows: the percentage as being; 11.4 for Vocational Agriculture, 16.7 for Distributive Education, Health Education 11.4, Home Economics Education 17.4, Industrial Arts Education 9.8, Office and Business Education 13.6, Technical Education 4.5, and Trade and Industrial Education 22.0. The percentage reporting exceeds 100 per cent because 9 persons were enrolled in more than one area.

TABLE 3.25

VOCATIONAL PROGRAM AREA(S) ENROLLMENT

Response Choice (Program Area)	Frequency	Per Cent
Vocational Agriculture	15	11.4
Distributive Education	22	16.7
Health Education	15	11.4
Home Economics Education	23	17.4
Industrial Arts Education	13	9.8
Office and Business Education	18	13.6
Technical Education	6	4.5
Trade and Industrial Education	29	22.0
Total	141	113.1

When those who did not complete the program were asked to indicate the percentage they did complete, 20.7 per cent indicated they completed under 25 per cent, 27.6 per cent indicated they completed between 26 and 50 per cent, 17.2 per cent indicated they completed between 51 and 75 per cent, and 34.5 indicated they completed over 75 per cent of the program. This is shown in Table 3.26.

TABLE 3.26

PER CENT OF PROGRAM COMPLETED BY THOSE WHO DID NOT FINISH THE PROGRAM

Response Choice (Percentage Completed)	Frequency	Per Cent
Under 25 per cent	6	20.7
26 - 50 per cent	8	27.6
51 - 75 per cent	5	17.2
Over 75 per cent	10	34.5
Total	29	100.0

There is some discrepancy between the number who responded to this question and question 1, which asked who had not completed the program. Twenty-nine responded here, whereas only 25 persons failed to indicate they had not completed the program as shown in Table 3.26. Some who had actually completed the program checked the last response in this question.

In response to a question concerning what further educational training graduates have participated in since attending the vocational program, the results, Table 3.27, show that 34.1 per cent have had employer sponsored on-the-job training, while 29.5 per cent had continued their training at the University, College, or Junior College level. No further educational training was indicated by 25.8 per cent. Some persons had received more than one type of further educational training, thus resulting in a total percentage of greater than 100 per cent.

TABLE 3.27

ADDITIONAL EDUCATIONAL TRAINING SINCE ATTENDING THE VOCATIONAL PROGRAM

Response Choice (Type of Training)	Frequency	Per Cent*
On-the-Job Training (employer sponsored)	45	34.1
Public Area Vocational School	7	5.3
Private Vocational Program(s)	2	1.5
University, College and/or Junior College	39	29.5
Apprenticeship	3	2.3
Specialized Occupational Military Training	6	4.5
None	34	25.8
Other	8	6.1
Total	144	109.1

*Percentage is based on 132 respondents.

Other responses included real estate school, key punch, army, mechanical engineering, nursing, assistant manager training, Dale Carnegie, technical and auto mechanics.

When asked if additional training was related to previous vocational training, over 40 per cent stated yes, while only 34.1 per cent stated it was not. This is shown in Table 3.28.

TABLE 3.28

ADDITIONAL TRAINING RELATED TO PREVIOUS VOCATIONAL TRAINING

Response Choice	Frequency	Per Cent
Yes	58	43.9
No	45	34.1
No Response	29	22.0
Total	132	100.0

Of the respondents, 33.3 per cent were furthering their education full-time while 39.2 per cent were furthering their education part-time. There were 44.7 per cent no responses to the question.

II. Vocational Experience Since Leaving High School

Table 3.29 lists the number of jobs the former students have had since leaving the vocational program. Slightly over 40 per cent had one job, while 23.5 per cent have had two jobs. As many as three jobs were listed by 9.8 per cent.

Concerning unemployment, 16.7 per cent of the respondents were unemployed. Approximately 24 per cent stated they were unavailable for employment. Several reasons for employment unavailability were listed. These are shown in Table 3.30.

TABLE 3.29

NUMBER OF JOBS SINCE LEAVING VOCATIONAL PROGRAM

Response Choice (Number of Jobs)	Frequency	Per Cent
One	53	40.2
Two	31	23.5
Three	13	9.8
Four	9	6.8
Five	2	1.5
Six or More	0	
No Response	24	18.2
Total	132	100.0

TABLE 3.30

REASONS FOR EMPLOYMENT UNAVAILABILITY

Response Choice (Reason)	Frequency	Per Cent
Military	5	11.4
Further Training or Education	21	47.7
Illness	2	4.5
Housewife	4	9.1
Pregnancy	1	2.3
Other	11	25.0
Total	44	100.0

The "Other" category was comprised of persons who said they were presently employed, attending college, paternal responsibility and looking for a job.

Table 3.31 shows the number of hours per week respondents usually work on their present job, while Table 3.32 shows the number of months they have been employed at their present job.

TABLE 3.31

HOURS PER WEEK USUALLY WORKED ON PRESENT JOB

Response Choice (Hours)	Frequency	Per Cent
Less than 20	10	7.6
20 - 29	9	6.8
30 - 34	3	2.3
35 - 40	37	28.0
More than 40	33	25.0
No Response	40	30.3
Total	132	100.0

The highest per cent of respondents work 35 to 40 hours per week, while 43 per cent have only held their present job for 12 months or less.

When asked to indicate their beginning hourly wage on their first full-time job, 59.1 per cent indicated it was $2.01 to $3.00 per hour. Almost 14 per cent indicated it was $3.01 to $4.00 per hour. The total responses are shown in Table 3.33

TABLE 3.32

NUMBER OF MONTHS EMPLOYED AT PRESENT JOB

Response Choice (Months)	Frequency	Per Cent
0 - 12	43	32.6
13 - 24	29	22.0
25 - 36	7	5.3
37 - 48	2	1.5
Over 48	6	4.5
No Response	45	34.1
Total	132	100.0

TABLE 3.33

STARTING HOURLY WAGE ON FIRST FULL-TIME JOB

Response Choice (Wage)	Frequency	Per Cent
$2.00 or less per hour	7	5.3
$2.01 - $3.00 per hour	78	59.1
$3.01 - $4.00 per hour	18	13.6
$4.01 - $5.00 per hour	2	1.5
$5.01 - $6.00 per hour	2	1.5
$6.01 or more per hour	1	.8
No Response	24	18.2
Total	132	100.0

The respondents indicated their highest hourly wage as shown in Table 3.34. The category of $2.01 to $3.00 had the highest percentage with 34.1, with 27.3 per cent checking the $3.01 to $4.00 category. Almost 10 per cent said they have earned between $4.01 and $5.00 per hour.

TABLE 3.34

HIGHEST HOURLY WAGE EARNED

Response Choice (Wage)	Frequency	Per Cent
$2.00 or less per hour	2	1.5
$2.01 - $3.00 per hour	45	34.1
$3.01 - $4.00 per hour	36	27.3
$4.01 - $5.00 per hour	13	9.8
$5.01 - $6.00 per hour	7	5.3
$6.01 or more per hour	7	5.3
No Response	22	16.7
Total	132	100.0

III. Attitudes Toward Vocational Program

Part III of the survey form concerned attitudes toward the participants' vocational program. As shown in Table 3.35, only 14.4 per cent said they were employed in the occupation for which they were trained, 25.8 per cent said they were doing work related to their training, and 32.6 per cent indicated they were engaged in a completely different occupation.

TABLE 3.35

RELATIONSHIP OF PRESENT JOB TO THE VOCATIONAL TRAINING RECEIVED

Response Choice	Frequency	Per Cent
Employed in Occupation for which Trained	19	14.4
Employed in Related Occupation	34	25.8
Employed in Completely Different Occupation	43	32.6
No Response	36	27.3
Total	132	100.0

The participants were asked how often, on their present job, they use the knowledge and skill acquired from their vocational training. Approximately one-fourth said frequently, 21.2 per cent occasionally, while 15.2 per cent indicated seldomly. The results are shown in Table 3.36.

TABLE 3.36

UTILIZATION OF KNOWLEDGE AND SKILL ACQUIRED FROM VOCATIONAL TRAINING

Response Choice	Frequency	Per Cent
Frequently	34	25.8
Occasionally	28	21.2
Seldom	20	15.2
Never	15	11.4
No Response	35	26.5
Total	132	100.0

Table 3.37 shows the responses to the question, "Considering all of your occupational experience since leaving school, how well do you feel your vocational program prepared you?" Over 77 per cent said they were either well prepared or satisfactorily prepared.

TABLE 3.37

HOW WELL VOCATIONAL PROGRAM PREPARED
STUDENT FOR EMPLOYMENT

Response Choice	Frequency	Per Cent
Well Prepared	50	37.9
Satisfactorily Prepared	52	39.4
Inadequately Prepared	9	6.8
No Response	21	15.9
Total	132	100.0

In response to the question about how participants would rate the knowledge their vocational instructors possessed about the subject matter, almost 88 per cent indicated the instructors were either average, above average or excellently prepared. Only 3 per cent felt their instructors were poorly prepared. Table 3.38 shows the total responses.

As shown in Table 3.39, only 4.5 per cent of the respondents felt that their vocational instructor was either below average or poor.

When asked to rate the interest shown by the vocational instructors in their work and progress since leaving school, 67.5 per cent rated the interest average or above. Almost 20 per cent rated their instructor's interest below average or poor. This is shown in Table 3.40.

TABLE 3.38

KNOWLEDGE VOCATIONAL INSTRUCTORS POSSESSED ABOUT SUBJECT MATTER

Response Choice	Frequency	Per Cent
Excellent	44	33.3
Above Average	43	32.6
Average	29	22.0
Below Average	0	0
Poor	4	3.0
No Response	12	9.1
Total	132	100.0

TABLE 3.39

EXTENT VOCATIONAL INSTRUCTION WAS UP-TO-DATE IN FIELD TAUGHT

Response Choice	Frequency	Per Cent
Excellent	30	22.7
Above Average	48	36.4
Average	35	26.5
Below Average	2	1.5
Poor	4	3.0
No Response	13	9.8
Total	132	100.0

TABLE 3.40

INSTRUCTOR'S INTEREST IN VOCATIONAL GRADUATE'S WORK AND PROGRESS

Response Choice (Rating)	Frequency	Per Cent
Excellent	20	15.2
Above Average	26	19.7
Average	43	32.6
Below Average	10	7.6
Poor	16	12.1
No Response	17	12.9
Total	132	100.0

TABLE 3.41

PREPARATION TO WORK WITH SUPERVISORS AND FELLOW WORKERS

Response Choice	Frequency	Per Cent
Excellent Preparation	24	18.2
Adequate Preparation	61	46.2
Some Preparation	19	14.4
No Preparation	9	6.8
No Response	19	14.4
Total	132	100.0

When asked to rate how well they were prepared to work with their supervisors and fellow workers, 64.4 per cent said they were either excellently or adequately prepared. Only 6.8 per cent indicated they had no preparation as shown in Table 3.41.

Respondents rated the vocational school facilities and equipment with the facilities and equipment on their present job. As shown in Table 3.42, 41.7 per cent indicated that they were similar and 17.4 indicated superior. Only 9.8 per cent stated that they were inferior.

TABLE 3.42

COMPARISON OF VOCATIONAL SCHOOL FACILITIES AND EQUIPMENT AND THOSE USED ON PRESENT JOB

Response Choice (Rating)	Frequency	Per Cent
Superior to Those on Job	23	17.4
Similar to Those on Job	55	41.7
Inferior to Those on Job	13	9.8
No Response	41	31.1
Total	132	100.0

The former students were asked if they have used the job placement services provided by the school since receiving their first full-time job. While 18.9 per cent did not respond, 9.1 indicated they had and 72 per cent stated they had not. This is shown in Table 3.43.

When asked if they would recommend their vocational program to others, 81.8 per cent stated that they would, while only 3.8 per cent stated that they would not, as shown in Table 3.44.

TABLE 3.43

USE OF JOB PLACEMENT SERVICES PROVIDED BY SCHOOL SINCE RECEIVING FIRST FULL-TIME JOB

Response Choice	Frequency	Per Cent
Yes	12	9.1
No	95	72.0
No Response	25	18.9
Total	132	100.0

TABLE 3.44

RECOMMEND VOCATIONAL PROGRAM TO OTHERS

Response Choice	Frequency	Per Cent
Yes	108	81.8
No	5	3.8
No Response	19	14.4
Total	132	100.0

The participants were asked to rate several items pertaining to their vocational program as shown in Table 3.45. Quality of instruction, teacher interest, reputation in the community, and vocational shop facilities

RATING OF VOCATIONAL PROGRAM

Item	Frequency (Percentage)						
	Excellent	Good	Fair	Poor	Missing	No Response	Total Per Cent
Quality of Instruction	39(29.5)	60(45.5)	8(6.1)	3(2.3)	2(1.5)	20(15.2)	100.0
Teacher Interest	48(36.4)	42(31.8	15(11.4)	5(3.8)	0	22(16.7)	100.0
Instructional Materials and Aids	25(18.9)	53(40.2)	21(15.9)	8(6.1)	3(2.3)	22(16.7)	100.0
Vocational Counseling	18(13.6)	40(30.3)	31(23.5)	13(9.8)	6(4.5)	24(18.2)	100.0
Preparation for Job Interview	22(16.7)	22(16.7)	27(20.5)	9(6.8)	26(19.7)	26(19.7)	100.0
Job Placement Services	8(6.1)	21(15.9)	32(24.2)	11(8.3)	32(24.2)	28(21.2)	100.0
Practical Application of Training to Job	11(8.3)	43(32.6)	22(16.7)	7(5.3)	21(15.9)	28(21.2)	100.0
Reputation in Community	23(17.4)	54(40.9)	17(12.9)	0	9(6.8)	29(22.0)	100.0
Vocational Shop Facilities	25(18.9)	45(34.1)	17(12.9)	5(3.8)	14(10.6)	26(19.7)	100.0
Providing Employable Skills	22(16.7)	52(39.4)	21(15.9)	3(2.3)	8(6.1)	26(19.7)	100.0
Specialized Units of Instruction	13(9.8)	40(30.3)	32(24.2)	6(4.5)	13(9.8)	28(21.2)	100.0
Study, Library, Learning Resources	19(14.4)	31(23.5)	30(22.7)	6(4.5)	18(13.6)	28(21.2)	100.0
Counseling Facilities & Persons	18(13.6)	39(29.5)	22(16.7)	12(9.1)	15(11.4)	26(19.7)	100.0
Help in Obtaining Financial Assistance	12(9.1)	20(15.2)	16(12.1)	4(3.0)	53(40.2)	27(20.5)	100.0
Youth Organizations	17(12.9)	30(22.7)	21(15.9)	5(3.8)	31(23.5)	28(21.2)	100.0

TABLE 3.45

received the highest ratings. Vocational counseling, preparation for a job interview, and help in obtaining financial assistance received the lowest ratings.

IV. Services Provided by Vocational Program After Graduation

Table 3.46 shows how the former students felt about services that should be provided after graduation.

TABLE 3.46

SERVICES PROVIDED BY VOCATIONAL PROGRAM AFTER GRADUATION

Response Choice (Service)	Frequency	Per Cent*
Continuous Job Placement Services	53	40.2
Career Information	43	32.6
Continuing Vocational Education	33	25.0
Vocational Program Newletter	59	44.7
No Continuing Services	13	9.8

*Per cent is based on 132 responses

V. Job Classifications for 71-72 & 75-76 Students

Participants were asked to indicate their present job title and describe their present duties. Table 3.47 reports those occupations using the Standard Occupational Classification (SOC) Code Stub. None respondents for 1975-1976 was quite high, 28.7 per cent, because many are in school and unavailable for employment or are unemployed.

OCCUPATIONS LISTED BY STANDARD OCCUPATIONAL CLASSIFICATION (SOC) CODE STUB

1971-1972 Respondents		Class No.	Occupation Classification *Frequency (Per Cent)	1975-1976 Respondents	
6	(5.9)*	14	Management Related Occupations	*6	(4.5)
8	(7.8)	17	Computed, Mathematical, and Operations Research Occupations	9	(6.8)
1	(1.0)	29	Registered Nurses	0	
1	(1.0)	30	Pharmacists, Dieticians, Therapists, and Physician's Assistants	2	(1.5)
4	(3.9)	32	Writers, Artists, Performers, and Related Workers	1	(0.8)
0		36	Health, Technologists and Technicians	2	(1.5)
2	(1.9)	37	Engineering and Related Technologists and Technicians	2	(1.5)
1	(1.0)	38	Science Technologists and Technicians	1	(0.8)
4	(3.9)	39	Technicians: Except Health, Engineering and Science	2	(1.5)
7	(6.9)	41	Sales Occupations, Commodities	9	(6.8)
0		42	Insurance, Real Estate,and Service Sales Occupations	2	(1.5)
3	(3.9)	45	Supervisors: Clerical Occupations	0	
5	(4.9)	46-47	Clerical Occupations, Except Equipment Operators	11	(8.3)
4	(3.9)	48	Computing and Office Equipment Operators	0	
2	(1.9)	51	Protective Service Occupations	3	(2.3)

TABLE 3.47

1971-1972 Respondents		Class No.	Occupation Classification *Frequency (Per Cent)	1975-1976 Respondents	
2	(1.9)	52	Service Occupations: Except Private and Household and Protective	10	(7.6)
5	(4.9)	55	Farm Operators and Managers	3	(2.3)
0		57	Forestry and Logging Occupations	1	(0.8)
0		58	Fishers, Hunters, and Trappers	0	
2	(1.9)	61	Construction Trades	11	(8.3)
4	(3.9)	64-65	Transportation and Material Moving Occupations	3	(2.3)
7	(6.9)	67	Mechanics and Repairers	5	(3.8)
9	(8.8)	72	Precision Production Occupations	2	(1.5)
14	(13.7)	77	Fabricators, Assemblers, and Hand Working Occupations	6	(4.5)
7	(6.9)	99	Occupations Not Elsewhere Classified Includes: Teachers, Ministers, Teacher's Aides and Military	3	(2.3)
4	(3.9)		No Response	38	(28.7)
102	(99.7)		Total	132	(99.9)

TABLE 3.47 (CONTINUED)

Results of 1971-1972 Vocational Employer Survey

Of the 102 student survey forms returned for the 1971-1972 school year, 73 indicated an employer name and address. Those who were unemployed or unavailable for employment could not respond to this part. Also, some were self-employed and omitted this section. As a result of the student response, 73 employers were sent the Tennessee Vocational Employer Survey Form. Of this number, 27 employers returned the form for a total return of 37.0 per cent, four were unusable either because they were received after the June 23, 1978 cut-off date or because the returned form was incomplete. Therefore, the usable returns numbered 23 for a percentage of 31.5. The following data are based on the information contained in the usable returned forms.

When asked how they would rate the vocational student's performance, almost 70 per cent indicated it was either good or excellent. Only 4.3 per cent indicated poor performance as shown in Table 3.48.

TABLE 3.48

EMPLOYEE'S PERFORMANCE

Response Choice	Frequency	Per Cent
Excellent	6	26.1
Good	10	43.5
Average	4	17.4
Fair	2	8.7
Poor	1	4.3
Total	23	100.0

In regard to the employee's ability to perform assigned tasks without excessive instruction, 21.7 per cent stated it was excellent, 34.8 per cent stated that it was good, and 30.4 per cent stated average. Table 3.49 shows the complete results.

TABLE 3.49

EMPLOYEE'S ABILITY TO PERFORM ASSIGNED TASKS WITHOUT EXCESSIVE INSTRUCTION

Response Choice	Frequency	Per Cent
Excellent	5	21.7
Good	8	34.8
Average	7	30.4
Fair	2	8.7
Poor	1	4.3
Total	23	100.0

Employers were asked to rate employees on 11 items regarding worker traits as shown in Table 3.50. Of these traits, work attitudes, attendance, willingness to be supervised, ability to work with the supervisor and other employees, and general appearance received the highest ratings. Willingness to improve skills, communication ability, and ability to work unsupervised were rated the lowest.

Almost 70 per cent of the employees were rated above average or superior when employers were asked to rate their performance in comparison with peers who had not had Tennessee secondary school vocational training. Refer to Table 3.51.

RATING OF WORKER TRAITS BY EMPLOYERS

			*Frequency (Per Cent)				
Worker Trait	Excellent	Good	Average	Fair	Poor	No Response	Total Per Cent
Work Attitudes	*7(30.4)	11(47.8)	4(17.4)	1(4.3)	0		100.0
Willingness to Improve His/Her Work Skills	5(21.7)	9(39.1)	6(26.1)	3(13.0)	0		100.0
Work Attendance	10(43.5)	10(43.5)	1(4.3)	1(4.3)	0	1(4.3)	100.0
Willingness to be Supervised	7(30.4)	11(47.8)	5(21.7)	0	0		100.0
Ability to Work Unsupervised	4(17.4)	6(26.1)	9(39.1)	3(13.0)	1(4.3)		100.0
Ability to Perform Assigned Tasks	6(26.1)	10(43.5)	4(17.4)	3(13.0)	0		100.0
Ability to Work with You and Other Employers	9(39.1)	9(39.1)	5(21.7)	0	0		100.0
General Appearance	4(17.4)	13(56.5)	5(21.7)	1(4.7)	0		100.0
Technical Ability	4(17.4)	9(39.1)	5(21.7)	5(21.7)	0		100.0
Communication Ability	4(17.4)	7(30.4)	6(26.1)	5(21.7)	1(4.3)		100.0
General Overall Abilities	6(26.1)	9(39.1)	7(30.4)	1(4.3)	0		100.0

TABLE 3.50

TABLE 3.51

VOCATIONAL STUDENT'S PERFORMANCE IN COMPARISON WITH THEIR PEERS WHO HAD NO TENNESSEE VOCATIONAL TRAINING

Response Choice	Frequency	Per Cent
Superior	2	8.7
Above Average	14	60.9
Average	6	26.1
Below Average	1	4.3
Total	23	100.0

TABLE 3.52

NEED FOR MORE VOCATIONAL TRAINING

Response Choice	Frequency	Per Cent
Yes	13	56.5
No	9	39.1
No Response	1	4.3
Total	23	100.0

When asked if the employees should have received more high school vocational training, 56.5 per cent responded affirmitively while 39.1 per cent indicated no as shown in Table 3.52.

An overwhelming majority, 87.0 per cent, of employers stated that they would hire other former Tennessee secondary school vocational education students if they had a need as shown in Table 3.53.

TABLE 3.53

ATTITUDE TOWARD HIRING ADDITIONAL VOCATIONAL STUDENTS

Response Choice	Frequency	Per Cent
Yes	20	87.0
No	2	8.7
No Response	1	4.3
Total	23	100.0

Employers were asked to rate employees' vocational training in nine different areas. Table 3.54 indicates that employers rated the quality of instruction, reputation of the program in the community, vocational shop facilities, and provision of employable skills very high. The practical application of training to the job, specialized units of instruction, and relevancy to current business or production methods received somewhat lower ratings.

Almost 70 per cent of the employers stated that the degree to which the local vocational program(s) instructional staff cooperated with their firm was good or excellent. See Table 3.55.

Table 3.56 shows employers' response to the question, "How would you rate the local vocational program(s) willingness to change instruction to better meet the needs of your firm?" A good or excellent rating was given by 43.4 per cent, while 30.6 per cent were unable to respond to the question.

EMPLOYERS RATING OF SELECTED AREAS OF EMPLOYEES' VOCATIONAL TRAINING

	*Frequency (Per Cent)						
Area	Excellent	Good	Average	Fair	Poor	Unable to Respond	Per Cent
Quality of Instruction	*5(21.7)	9(39.1)	5(21.7)	2(8.7)	0	2(8.7)	100.0
Preparation for Job Interview	2(8.7)	12(52.1)	7(30.4)	0	1(4.3)	1(4.3)	100.0
Practical Application of Training to Job	7(30.4)	5(21.7)	9(39.1)	1(4.3)	0	1(4.3)	100.0
Reputation of Program in Community	8(34.8)	9(39.1)	3(13.0)	2(8.7)	0	1(4.3)	100.0
Vocational Shop Facilities	5(21.7)	9(39.1)	3(13.0)	4(17.4)	0	2(8.7)	100.0
Providing Employable Skills	6(26.1)	6(26.1)	8(34.8)	1(4.3)	1(4.3)	1(4.3)	100.0
Specialized Units of Instruction	6(26.1)	4(17.4)	7(30.4)	2(8.7)	1(4.3)	3(13.0)	100.0
Relevancy to Current Business or Production Methods	3(13.0)	7(30.4)	5(21.7)	5(21.7)	1(4.3)	2(8.7)	100.0
Overall Vocational Preparation	4(17.4)	9(39.1)	4(17.4)	2(8.7)	1(4.3)	3(13.0)	100.0

TABLE 3.54

TABLE 3.55

INSTRUCTIONAL STAFFS' COOPERATION WITH EMPLOYERS

Response Choice	Frequency	Per Cent
Excellent	9	39.1
Good	7	30.4
Average	2	8.7
Fair	1	4.3
Poor	1	4.3
Unable to Respond	3	13.2
Total	23	100.0

TABLE 3.56

LOCAL PROGRAM(S) WILLINGNESS TO CHANGE INSTRUCTION TO MEET LOCAL NEEDS

Response Choice	Frequency	Per Cent
Excellent	1	4.3
Good	9	39.1
Average	5	21.7
Fair	1	4.3
Poor	0	
Unable to Respond	7	30.6
Total	23	100.0

When asked to indicate services that they felt should be provided by the vocational program after graduation, employers listed continuous job placement services the most often as indicated in Table 3.57. Although they were given an opportunity to list other services that might be needed, none did so.

TABLE 3.57

SERVICES EMPLOYERS FEEL SHOULD BE PROVIDED BY THE VOCATIONAL PROGRAM AFTER GRADUATION

Response Choice (Service)	Frequency	Per Cent
Continuous Job Placement Services	16	69.6
Continuing Vocational Education	12	52.2
Career Information	11	47.8
None	1	4.3

TABLE 3.58

VOCATIONAL PROGRAMS PROVISION FOR JOB PLACEMENT AS KNOWN BY EMPLOYERS

Response Choice	Frequency	Per Cent
Yes	10	43.5
No	2	8.7
Do Not Know	11	47.8
Total	23	100.0

Employers were asked if the vocational program(s) in their area provided job placement services and 47.8 per cent indicated they did not know, 43.5 per cent indicated that they did, and 8.7 per cent indicated that they did not. Refer to Table 3.58.

Of the employers who stated that the local program(s) provided job placement, 90.0 per cent stated that their firm did make use of it.

Results of 1975-1976 Vocational Employer Survey

Of the 102 student survey forms returned for the 1975-1976 school year, 92 indicated an employer name and address. Those who were unemployed or unavailable for employment could not respond to this part. Also, some were self-employed and omitted this section. As a result of the student response, 92 employers were sent the Tennessee Vocational Employer Survey Form. Of this number, 32 employers returned the form for a total return of 34.7 per cent. Four were unusable either because they were received after the June 23, 1978 cut-off date or because the returned form was incomplete. Therefore, the usable returns numbered 28 for a percentage of 30.4. The following data are based on the information contained in the usable returned forms.

Employers were asked to rate the former vocational students in regard to their work performance. It was found that 85.7 per cent rated the performance either good or excellent. No employer indicated "fair" or "poor" performance as shown in Table 3.59.

When asked to rate employer's ability to perform assigned tasks without excessive instruction, 21.4 per cent rated it excellent, 60.7 per cent good, and 17.9 per cent rated it excellent. Refer to Table 3.60.

TABLE 3.59

EMPLOYEE'S PERFORMANCE

Response Choice	Frequency	Per Cent
Excellent	4	14.3
Good	20	71.4
Average	4	14.3
Fair	0	
Poor	0	
Total	28	100.0

TABLE 3.60

EMPLOYEE'S ABILITY TO PERFORM ASSIGNED TASKS WITHOUT EXCESSIVE INSTRUCTION

Response Choice	Frequency	Per Cent
Excellent	6	21.4
Good	17	60.7
Average	5	17.9
Fair	0	
Poor	0	
Total	28	100.0

RATING OF WORKER TRAITS BY EMPLOYERS

	*Frequency (Per Cent)						
Worker Trait	Excellent	Good	Average	Fair	Poor	No Response	Total Per Cent
Work Attitudes	*4(14.3)	18(64.3)	5(17.9)	1(3.6)	0		100.0
Willingness to Improve His/Her Work Skills	8(28.6)	10(35.7)	9(32.1)	1(3.6)	0		100.0
Work Attendance	11(39.3)	11(39.3)	3(10.7)	2(7.1)	0	1(3.6)	100.0
Willingness to be Supervised	6(21.4)	14(50.0)	6(21.4)	0	0	2(7.1)	100.0
Ability to Work Unsupervised	7(25.0)	12(42.9)	7(25.0)	2(7.1)	0		100.0
Ability to Perform Assigned Tasks	7(25.0)	15(53.6)	6(21.4)	0	0		100.0
Ability to Work with You and Other Employees	7(25.0)	14(50.0)	6(21.4)	0	0	1(3.6)	100.0
General Appearance	4(14.3)	12(42.9)	10(35.7)	1(3.6)	1(3.6)		100.0
Technical Ability	5(17.9)	13(46.4)	8(28.6)	1(3.6)	1(3.6)		100.0
Communication Ability	3(10.7)	12(42.9)	12(42.9)	1(3.6)	0		100.0
General Overall Ability	3(10.7)	20(71.4)	5(17.9)	0	0		100.0

TABLE 3.61

As shown in Table 3.61, when employers were asked to rate employees on eleven different worker traits, the vast majority indicated employees rated either average, good or excellent on almost all traits. Work attendance and the ability to work unsupervised were the only two that had any substantial lower rating.

Over 64 per cent of the employees were rated above average or superior when employers were asked to rate their performance in comparison with peers who had not had Tennessee secondary school vocational training. See Table 3.62.

TABLE 3.62

VOCATIONAL STUDENT'S PERFORMANCE IN COMPARISON WITH THEIR PEERS WHO HAD NO TENNESSEE VOCATIONAL TRAINING

Response Choice	Frequency	Per Cent
Superior	4	14.3
Above Average	14	50.0
Average	9	32.1
Below Average	0	0
No Response	1	3.6
Total	28	100.0

When asked if employees should have received more high school vocational training, 53.6 per cent responded negatively while 42.9 indicated yes as shown in Table 3.63.

All employers said that they would hire other former Tennessee secondary education students if they had a need. See Table 3.64.

TABLE 3.63

NEED FOR MORE VOCATIONAL TRAINING

Response Choice	Frequency	Per Cent
Yes	12	42.9
No	15	53.6
No Response	1	3.6
Total	28	100.0

TABLE 3.64

ATTITUDE TOWARD HIRING ADDITIONAL VOCATIONAL STUDENTS

Response Choice	Frequency	Per Cent
Yes	28	100.0
No	0	
Total	28	100.0

Table 3.65 shows nine different areas that employers were asked to rate regarding the vocational training that employees received. Quality of instruction, the practical application of training to the job, the reputation of the program in the community, providing employable skills and the overall vocational preparation received the highest rating. Lower ratings were given to specialized units of instruction and the relevancy to current business or production methods. However, there were several who indicated that they were unable to respond to the items.

EMPLOYERS RATING OF SELECTED AREAS OF EMPLOYEES' VOCATIONAL TRAINING

	*Frequency (Per Cent)						
Area	Excellent	Good	Average	Fair	Poor	Unable to Respond	Total Per Cent
Quality of Instruction	*4(14.3)	16(57.1)	6(21.4)	2(7.1)	0		100.0
Preparation for Job Interview	3(10.7)	9(32.1)	8(28.6)	2(7.1)	1(3.6)	5(17.9)	100.0
Practical Application of Training to Job	1(14.3)	12(42.9)	9(32.1)	3(10.7)	0		100.0
Reputation of Program in Community	6(21.4)	11(39.3)	7(25.0)	0	0	4(14.3)	100.0
Vocational Shop Facilities	5(17.9)	8(28.6)	8(28.6)	3(10.7)	0	4(14.3)	100.0
Providing Employable Skills	4(14.3)	17(60.7)	4(14.3)	2(7.1)	1(3.6)		100.0
Specialized Units of Instruction	4(14.3)	9(32.1)	6(21.4)	1(3.6)	1(3.6)	7(25.0)	100.0
Relevancy to Current Business or Production Methods	4(14.3)	8(28.6)	10(35.7)	1(3.6)	0	5(17.9)	100.0
Overall Vocational Preparation	3(10.7)	17(60.7)	5(17.9)	3(10.7)	0		100.0

TABLE 3.65

The degree to which the instructional staffs of local vocational programs cooperated with employers is indicated in Table 3.66. An excellent rating was given by 28.6 per cent and a good rating by 35.7 per cent. However, 21.4 per cent indicated that they were unable to respond.

TABLE 3.66

INSTRUCTIONAL STAFFS' COOPERATION WITH EMPLOYERS

Response Choice	Frequency	Per Cent
Excellent	8	28.6
Good	10	35.7
Average	4	14.3
Fair	0	
Poor	0	
Unable to Respond	6	21.4
Total	28	100.0

Table 3.67 shows employers response to the question, "How would you rate the vocational program(s) willingness to change instruction to better meet the needs of your firm?" A good or excellent rating was given by 57.1 per cent, while 35.8 per cent were unable to respond to the question.

Employers were asked to indicate services that they felt should be provided by the vocational program after graduation. As shown in Table 3.68, continuous job placement services was listed most often with continuing vocational education next.

TABLE 3.67

LOCAL PROGRAM(S) WILLINGNESS TO CHANGE INSTRUCTION TO MEET LOCAL NEEDS

Response Choice	Frequency	Per Cent
Excellent	7	25.0
Good	9	32.1
Average	2	7.1
Fair	0	
Poor	0	
Unable to Respond	10	35.8
Total	28	100.0

TABLE 3.68

SERVICES EMPLOYERS FEEL SHOULD BE PROVIDED BY THE VOCATIONAL PROGRAM AFTER GRADUATION

Response Choice (Service)	Frequency	Per Cent
Continuous Job Placement Services	15	53.6
Continuing Vocational Education	14	50.0
Career Information	13	46.4
None	3	10.7

Employers were asked if the vocational program(s) in their area provided job placement services and 46.4 per cent indicated they did not know, 42.9 per cent indicated that they did, and 10.7 per cent indicated that they did not. See Table 3.69.

TABLE 3.69

VOCATIONAL PROGRAMS PROVISION FOR JOB PLACEMENT
AS KNOWN BY EMPLOYERS

Response Choice	Frequency	Per Cent
Yes	12	42.9
No	3	10.7
Do Not Know	13	46.4
Total	28	100.0

Of the employers who stated that the local program(s) provided job placement, 91.6 per cent stated that their firm did make use of it.

Chapter 4

SUMMARY, CONCLUSIONS, RECOMMENDATIONS

Student Survey Summary

The sample for the 1971-1972 follow-up consisted of 1,013 former vocational students. Of that number, usable responses were received from 102 former students, giving a response rate of 10.1 per cent. There were 1,032 former students included in the sample population for 1975-1976. Of that number, usable responses were received from 132 for a response rate of 12.7 per cent.

Part I of the Tennessee Vocational Student Survey pertained to general information. For the 1971-1972 group, 75.5 per cent completed their vocational program. This percentage increased for the 1975-1976 group to over 81 per cent.

Responses were similar for the two groups concerning additional training since attending the vocational program. For the 1971-1972 group, 24.5 attended a university, college and/or junior college program while the percentage for the 1975-1976 sample was 29.5 per cent. Approximately 29 per cent of the 1971-1972 sample had received no additional training while a comparative 25.8 per cent was exhibited by the 1975-1976 group.

When asked if additional training was related to previous vocational training, over 40 per cent of the 1971-1972 sample stated yes. This compared to 43.9 per cent for the 1975-1976 sample.

Part II concerns vocational experiences since leaving high school. Concerning unemployment, 7.8 per cent of the 1971-1972 respondents were unemployed. This compared to 16.7 per cent of the 1975-1976 respondents.

A larger percentage of the 1971-1972 sample was earning a higher wage per hour than the 1975-1976 group. Over 38 per cent of the 1971-1972 were earning between $4.01 and $6.00 per hour. The 1975-1976 group showed 15.1 per cent earning between $4.01 and $6.00 per hour.

Part III of the student survey form concerned attitudes toward the participants' vocational program. The 1971-1972 sample demonstrated a higher percentage of being employed in the occupation for which they were trained. This comparative percentage was 21.6 per cent for the 1971-1972 sample to 14.4 per cent for the 1975-1976 group. The comparison of those working in a completely different occupation than trained were relatively similar. The 1975-1976 sample showed 32.6 per cent while the 1971-1972 group was 44.1 per cent.

Concerning utilization of knowledge and skill acquired from vocational training, the responses of the two groups were very similar. Those stating frequently or occasionally, 47 per cent were listed for 1975-1976 as compared to 50 per cent for 1971-1972.

Based on the former students' reactions, a higher percentage was listed by the 1975-1976 group as being "well prepared" for employment. Almost 38 per cent of the 1975-1976 sample felt they were well prepared while this compared to 29.4 per cent of the 1971-1972 group. The 1971-1972 sample showed 49 per cent stating they were satisfactorily prepared while this compared to 39.4 per cent for 1975-1976.

The former students' ratings of their instructors were similar. Over 86 per cent of the 1971-1972 sample rated their instructors' subject matter knowledge as average, above average, or excellent. This compared to 87.9 per cent for the 1975-1976 group. The most significant rating was in the "above average" response. The 1971-1972 group listed 26.5 in this group, while the 1975-1976 group listed 32.6 per cent of instructors as being above average.

When asked to rate how well they were prepared to work with their supervisors and fellow workers, a higher percentage was expressed by the 1975-1976 as being excellently or adequately prepared. The comparative percentages were 64.4 per cent for 1975-1976 and 51 per cent for 1971-1972.

The respondents' comparison of vocational school facilities and equipment and those used on their present job were comparable. The 1971-1972 sample rated 61.8 per cent as similar to or superior to those on the job, while the 1975-1976 rating was 59.1 per cent.

Use of job placement services were rated very much the same for the two groups. For the 1975-1976 sample, 9.1 indicated they had and 72 per cent stated they had not. Only 9.8 per cent of the 1971-1972 group stated they had and 73.5 per cent stated they had not used the job placement services provided by the vocational school since receiving their first full-time job.

Both groups listed high percentage for recommending the vocational program to others. Over 81 per cent in each group stated they would recommend the vocational program.

The participants were asked to rate several items pertaining to their vocational program. Quality of instruction, teacher interest, instructional materials and aids, reputation in community, providing employable skills, and vocational shop facilities received the highest excellent and good ratings for the 1971-1972 group. Quality of instruction, teacher interest, reputation in the community, and vocational shop facilities received the highest ratings for the 1975-1976 group. Vocational counseling, preparation for a job interview, and help in obtaining financial assistance received the lowest rating for the 1975-1976 group. The

1971-1972 group rated lowest obtaining financial assistance, job placement services, youth organizations, and preparation for job interview.

Employer Survey Summary

The number of employers who were sent and responded to the survey was much lower than desired, however, the primary problem related to the fact that the student response was low. Using the methods prescribed in the proposed follow-up system, (Chapter 5), should improve this in future studies.

Employers seemed to be very favorably impressed with the performance of their employees who had attended a Tennessee vocational education program. In regard to employees' ability to perform assigned tasks without excessive instruction, the 1975-1976 group of employers rating was very high. This same high rating continued when they rated the employees on eleven different worker traits. Work attitudes, the willingness to be supervised, the ability to work with supervisors and peers and general overall ability were all given a rating of good or excellent by more than 65 per cent of the of the employers. Ability to work unsupervised and communication ability were the only two traits that received several average or below ratings by the two groups of employers (1971-1972 and 1975-1976).

Performance by employees who had received vocational training as compared with peers who had not was rated above average or superior by over 64 per cent of the employers. Almost half of both employer groups felt that some additional training would have been desirable. With both groups of employers, the attitude toward hiring additional former Tennessee vocational school students was extremely positive.

When asked to rate the employees' vocational training in nine different areas, quality of instruction, reputation of the program in the community and the provision of employable skills were rated good or excellent by more than 52 per cent of both employer groups. Specialized units of instruction and the relevancy to current business or production methods rated somewhat lower.

Over 63 per cent of employers were very well pleased with the instructional staffs' cooperation with them. Over 53 per cent of both groups felt that the school should provide continuous job placement services after graduation and 50 per cent or more felt that continuing vocational education was important. Slightly less than half of both groups felt that the provision of career information was important.

Less than 44 per cent of both groups were aware of job placement services provided by the local program(s) and over 46 per cent did not know whether it was provided or not. Of those who were aware of the service, over 90 per cent of both groups indicated that their firm did make use of it.

Conclusions - Student Survey

1. The overall evaluation of the Tennessee Vocational Program by former students showed that they rate it very high. This is evidenced by the fact over 81 per cent in both the 1971-1972 and 1975-1976 groups would recommend the program to others.

2. Several items pertaining to the vocational program were rated as excellent or good. Those aspects receiving these ratings by both groups were: quality of instruction, teacher interest, instructional

materials and aids, reputation in community, vocational shop facilities, and providing employable skills.

3. Several items pertaining to the vocational program were rated as poor or missing. Those aspects receiving these ratings by both groups were: preparation for job interview, job placement services, help in obtaining financial assistance and youth organizations.

4. A high percentage of those enrolled in vocational programs complete the program. Of those enrolled in 1971-1972, over 75 per cent completed the program. This increased to 81.1 per cent in 1975-1976.

5. There was more unemployment in the 1975-1976 sample than in the 1971-1972 group. Although relatively low (7.8 per cent) for the 1971-1972 sample, the 1975-1976 group is more than twice this rate. This higher percentage could be because of being in the job market for a much shorter time and continuation of their education.

6. The majority of those completing the vocational program receive additional training. Most of these are on-the-job or training at a university, college, and/or junior college.

7. Approximately 40 per cent of the respondents are employed in an occupation or related occupation for which they were trained.

8. Fewer former vocational students are employed in a completely different occupation from which they were trained in 1975-1976 than in 1971-1972.

9. The majority (approximately 78 per cent) of former students were well prepared or satisfactorily prepared for employment.

10. With regard to instructors' subject matter knowledge, up-to-date instruction and interest in graduates' work and progress both groups rated instructors very high.

11. Based on the responses, the vocational school facilities and equipment are similar to or superior to those on the job. A low percentage found these inferior to those on the job.

12. A majority of the former vocational students do not use job placement services provided by the school since receiving their first full-time job. It is not known what percentage of schools provide this service.

Conclusions - Employer Survey

1. The overall evaluation of the Tennessee vocational program by employers showed that they rated it well above average. This was supported by the fact that 87 per cent of one group and 100 per cent of the other group of employers indicated that they would be willing

to hire additional graduates should the need arise. This tends to support the assumption that the program is fulfilling its intended purpose.

2. Concerning worker traits, the ability to work unsupervised and the communication skills of vocational students needs to be improved.

3. According to employers, a need apparently exist for many employees to get additional vocational training.

4. In regard to the vocational programs(s), employers indicated that providing specialized units of instruction and relating the training to current business or production methods could be strengthened.

5. Employers were relatively well satisfied with the cooperation of vocational instructional staffs with the employers firms.

6. Continuous job placement services to students after graduation is desirable according to the majority of employers.

7. Initial job placement services provided by vocational programs is not known by the majority of employers.

8. The reaction to existing placement services, specialized units of instruction, shop facilities, and other items seem to indicate a need for better public relations and communication between vocational programs and the industrial and business community.

Recommendations

1. Local vocational programs need to make a concerted effort to upgrade the communication skills of students and to give them more experience in working without instruction.
2. Students need to be actively encouraged to take additional vocational training.
3. Local programs need to identify and provide needed specialized units of instruction.
4. Vocational instructors need to continually upgrade their instruction so that current business or production methods are reflected.
5. Local programs should consider providing continuous job placement services to their graduates.
6. Local programs need to exert more effort in communicating to the community what their program is about and what services they provide.

7. The vocational student should be prepared for the job interview.

8. Emphasis should be placed on vocational youth organizations.

9. The vocational student should be given help in obtaining financial assistance during their training as well as after the completion of their training (Job placement).

10. Where and when possible, the vocational school should provide their former students with career information.

11. Better vocational counseling should be provided the student.

12. More emphasis should be made to match students' interest and the vocational program in which they enroll. This is evidenced by the high percentage of former students being employed in a completely different occupation from which they were trained.

Chapter 5

MODEL FOR VOCATIONAL EDUCATION FOLLOW-UP EVALUATION

Model Explanation

The existing management system for vocational education presently contains a two-part follow-up. One, enrollment data in each service area is determined and student information listed each year. Also, each year a vocational teacher-based follow-up of students enrolled the previous year is conducted. This follow-up, based on class rolls, determines the educational, program, and employment status of each student in secondary vocational education the prior year. Responses to this study are solicited from the vocational teacher. The form is shown in Appendix O.

One of the purposes of this study was to develop and implement a one and five-year student and employer based follow-up study of secondary vocational education. The results of this one and five-year study along with information gathered by the the existing system will be of assistance in making programmatic decisions at all levels. As a result of this study, the model shown in Figure 5-1 has been developed.

The primary purpose of the model is to provide information to allow programmatic decisions to be made at all levels (local, state, federal). This model features sequential steps with alternatives at critical events.

As a student enrolls in a vocational program, an explanation of that program is presented by the instructor. This is necessary in that this study found that several former vocational students did not realize that they had been in a vocational program. This was true of areas such as industrial arts, home economics, office occupations, and others. The

MODEL FOR TENNESSEE VOCATIONAL EDUCATION FOLLOW-UP EVALUATION

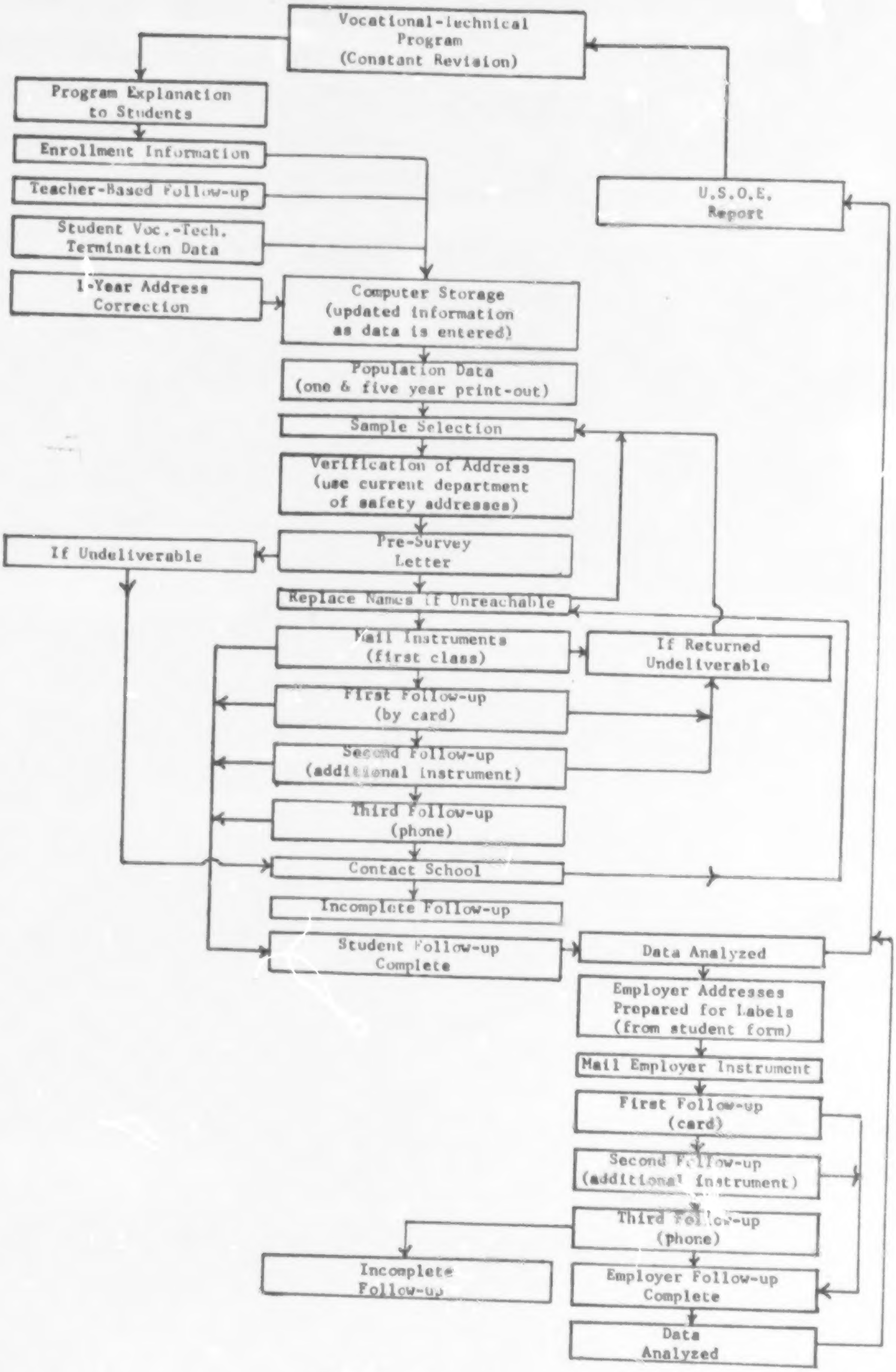
Vocational-Technical Program (Constant Revision)
Program Explanation to Students
Enrollment Information
Teacher-Based Follow-up
Student Voc.-Tech. Termination Data
1-Year Address Correction
Computer Storage (updated information as data is entered)
Population Data (one & five year print-out)
Sample Selection
Verification of Address (use current department of safety addresses)
Pre-Survey Letter
If Undeliverable
Replace Names if Unreachable
Mail Instruments (first class)
If Returned Undeliverable
First Follow-up (by card)
Second Follow-up (additional instrument)
Third Follow-up (phone)
Contact School
Incomplete Follow-up
Student Follow-up Complete
Data Analyzed
U.S.O.E. Report
Employer Addresses Prepared for Labels (from student form)
Mail Employer Instrument
First Follow-up (card)
Second Follow-up (additional instrument)
Third Follow-up (phone)
Incomplete Follow-up
Employer Follow-up Complete
Data Analyzed

FIGURE 5-1

enrollment information and teacher-based follow-up are to be conducted as they presently are, using the form shown in Appendix O.

Upon exiting the program, each student completes a Student Vocational Program Termination Form (Appendix P). This will give termination data that does not presently exist. The termination data is used to update the information that the student supplied at the time of enrollment.

One year after termination, an address correction for each student is solicited from the local school. It is felt that maintaining correct addresses of present and former students is of prime importance to any follow-up evaluation. This one year address correction can be made more easily by the local school since in many cases they have and can make contact with the former student.

Once the population has been selected for follow-up, the sample can be drawn using the formula as explained on page 8. After the sample is drawn, addresses can be verified through the use of current addresses as supplied by the Tennessee Department of Safety.

A pre-survey letter explaining the follow-up evaluation and asking a former student to participate is then mailed to each person in the sample. It is felt that this will result in a better response to the study. In the event the letter is undeliverable, the former student's school is contacted asking an update of the address. If the current address is not known, then the name is replaced by another from the population.

After all addresses in the sample are reasonably verified, the survey instrument is mailed first class. After approximately ten days, a follow-up reminder card is mailed to non-respondents. If a response is not received, another instrument is mailed approximately seven days after the reminder card.

If either the initial mailing of the instrument, reminder card or the second mailing of the instrument is returned undeliverable, the name is replaced with another from the total population. All those persons not responding to the second mailing of the survey instrument are contacted by phone. Phone numbers are acquired from the enrollment and termination data. If the phone follow-up is unsuccessful, the school is contacted and asked to make the final attempt to contact the former student.

The data from the completed student follow-up is analyzed and is used in the U.S.O.E. report and the constant revision of the vocational-technical programs. The names and addresses of employers to be used in the employer follow-up are collected in the student follow-up.

The employer instrument is mailed to all companies identified through the student survey. After approximately ten days, a reminder card is to be mailed to non-respondents. If the questionnaire is not completed and returned, then a second follow-up (additional instrument) is mailed approximately seven days after the reminder card. In the event all reminders fail, the non-respondents are contacted by telephone. The data generated by the employer survey is then analyzed, and results are used in the U.S.O.E. report and constant revision of the vocational-technical programs.

Results of both surveys are then supplied to appropriate persons. These results can be used to enhance and update vocational programmatic areas and will serve as useful decision making tools.

Changes Needed to Comply with Federal Vocational Education Data System Reporting

In late spring of 1978, the U.S. Department of Education issued a directive to all states concerning vocational education student and employee follow-up data that must be reported on an annual basis beginning with data collected during the 1978-1979 school year. The primary content of this directive is shown in Appendix P.

Since this directive was not available when the present study was developed, it is mandatory that some modifications be made in order to comply with the Federal Guidelines. The following discussion concerns these modifications.

The Federal Employer Follow-up Form (NCES 2404-6) is similar to the Tennessee Vocational Employer Survey Form. However, in order to make the two coincide the following changes are recommended for the present Tennessee Vocational Employer Survey Form: (1) For the responses to questions 1, 2, 3, 7, 8, and 9 the response choices should read "Very good", "Good", "Neutral", "Poor", and "Very poor"; (2) In question number 3, "Work attitudes" should be changed to "Work attitude", "Ability to perform assigned tasks" should be changed to "Work quality", and "Technical ability" should be changed to "Technical knowledge"; (3) The response choices for question number 4 should be changed to "no basis for comparison", "Individual is better prepared", "Both are about the same", and "Individual is less prepared".

This would provide the specific data requested. A revised form is shown in Appendix Q.

The Student Vocational Program Termination Form (Appendix P) will need to be used in order to gain reporting information. The completion status of students, the service area, racial/ethnic designation, sex, and handicapped designation are necessary for the report. All other information on the termination form is necessary for use in carrying out the follow-up procedures as discussed earlier.

Apparently, the Tennessee Student Survey Forms A and B (Appendix A and J) provide the necessary information. However, some attention will need to be given to the use of the Standard Occupational Classification (SOC) Code Stub.

If sampling is used in future studies, it must be one of the two techniques authorized by NCES.

It should be noted that the manner of identifying employers as recommended by NCES is identical to that used in the present study and recommended for the Tennessee follow-up system.

APPENDIX A

TENNESSEE VOCATIONAL STUDENT SURVEY: FORM A

DIRECTIONS FOR MARKING ANSWERS

- Use black lead pencils (No. 2½ or softer).
- Make heavy marks that fill the circle completely.
- Erase clearly any answer you wish to change.
- Make no stray marks on this sheet.

INCORRECT ⊘○ ⊗○ ◎○

CORRECT ●○ ●○ ●○

I. GENERAL INFORMATION

1. Did you complete your vocational program?

○ Yes ○ No

Please specify the program area(s) which you completed.

○ Vocational Agriculture
○ Distributive Education
○ Health Education
○ Home Economics Education
○ Industrial Arts Education
○ Office or Business Education
○ Technical Education
○ Trade and Industrial Education

If you did not complete the vocational program, what percentage of the program was completed?

○ under 25 percent ○ 51-75 percent
○ 26-50 percent ○ Over 75 percent

2. If you did complete the program, in what year? 19___

○70 ○71 ○72 ○73 ○74 ○75 ○76 ○77 ○78 ○79
○80 ○81 ○82 ○83 ○84 ○85 ○86 ○87 ○88 ○89
○90 ○91 ○92 ○93 ○94 ○95 ○96 ○97 ○98 ○99

3. Since attending the vocational program, what further educational training have you taken part in? (You may mark more than one.)

○ On-the-job training (employer-sponsored training)
○ Public area vocational school programs
○ Private vocational programs
○ University, college and/or junior college programs
○ Apprenticeship
○ Specialized occupational military training
○ None
○ Other (specify) ______________________

Is/Was this additional training related to your previous vocational training?

○ Yes ○ No

If you are furthering your educational training is it:

○ Full-time ○ Part-time

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II. VOCATIONAL EXPERIENCES SINCE LEAVING HIGH SCHOOL

1. How many jobs, including your first and present job, have you had since leaving the vocational program? (Do not include co-op positions.)

○ One ○ Three ○ Five
○ Two ○ Four ○ Six or more

2. If you are presently unemployed or unavailable for employment, please mark where applicable.

○ Unemployed
○ Unavailable for employment

For what reason are you unavailable for employment?

○ Military
○ Further training or education
○ Illness
○ Housewife
○ Pregnancy
○ Presently not working and not interested in employment
○ Other (specify) ______________________

3. How many hours per week do you usually work on your present job?

○ Less than 20 ○ 30-34 ○ More than 40
○ 20-29 ○ 35-40

Number of months employed at present job.

○ 00-12 ○ 25-36 ○ Over 48
○ 13-24 ○ 37-48

Present Job Title ______________________
Present Job Duties ______________________

4. What was your beginning hourly wage on your first full-time job, since leaving the vocational program?

○ $2.00 or less per hour
○ $2.01 to $3.00 per hour
○ $3.01 to $4.00 per hour
○ $4.01 to $5.00 per hour
○ $5.01 to $6.00 per hour
○ $6.01 or more per hour

5. What is the highest hourly wage you have earned?

○ $2.00 or less per hour
○ $2.01 to $3.00 per hour
○ $3.01 to $4.00 per hour
○ $4.01 to $5.00 per hour
○ $5.01 to $6.00 per hour
○ $6.01 or more per hour

III. ATTITUDES TOWARD YOUR VOCATIONAL PROGRAM

1. **How closely does your present job relate to the vocational training you received? (Mark only one line)**
   ○ I am employed in the occupation for which I was trained by this vocational program.
   ○ I am employed in a related occupation.
   ○ I am employed in a completely different occupation.

2. **How often, on your present job, do you use the knowledge and skill acquired from your vocational training?**
   ○ Frequently ○ Seldom
   ○ Occasionally ○ Never

3. **Considering all of your occupational experiences since leaving school, how well do you feel your vocational program prepared you?**
   ○ Well prepared
   ○ Satisfactorily prepared
   ○ Inadequately prepared

4. **How would you rate the knowledge your vocational instructors possessed about the subject matter?**
   ○ Excellent ○ Average ○ Poor
   ○ Above average ○ Below average

5. **How would you rate the extent to which the vocational instruction was up-to-date in the field?**
   ○ Excellent ○ Average ○ Poor
   ○ Above average ○ Below average

6. **How would you rate the interest shown by the vocational instructors in your work and progress since leaving school?**
   ○ Excellent ○ Average ○ Poor
   ○ Above average ○ Below average

7. **To what extent did the vocational program prepare you to work with your supervisors and fellow workers?**
   ○ Excellent preparation ○ Some preparation
   ○ Adequate preparation ○ No preparation

8. **In comparison to the facilities and equipment used on your present job, how would you rate your vocational school facilities and equipment?**
   ○ Facilities and equipment were superior to those on the job.
   ○ Facilities and equipment were similar to those on the job.
   ○ Facilities and equipment were inferior to those on the job.

9. **After you got your first job (full-time or part-time) following this vocational training, have you ever again used any of the job placement services provided by the school or this vocational program?**
   ○ Yes ○ No

10. **Would you recommend this vocational program to others?**
   ○ Yes ○ No

11. **Please rate your vocational program on the items listed below. (Mark column "Missing" only for those components that were not present in your vocational program.)**

Excellent	Good	Fair	Poor	Missing	
○	○	○	○	○	Quality of instruction
○	○	○	○	○	Teacher interest
○	○	○	○	○	Instructional materials and aids
○	○	○	○	○	Vocational counseling
○	○	○	○	○	Preparation for job interview
○	○	○	○	○	Job placement services
○	○	○	○	○	Practical application of training to job
○	○	○	○	○	Reputation in community
○	○	○	○	○	Vocational shop facilities
○	○	○	○	○	Providing employable skills
○	○	○	○	○	Specialized units of instruction
○	○	○	○	○	Study, library and other learning resource facilities
○	○	○	○	○	Counseling facilities and persons
○	○	○	○	○	Help in obtaining financial assistance
○	○	○	○	○	Youth organizations

IV. SERVICES PROVIDED BY YOUR VOCATIONAL PROGRAM AFTER GRADUATION

1. **What services do you feel should be provided by the vocational program after graduation? (Mark one or more of the following.)**
   ○ Continuous job placement services
   ○ Continuing vocational education
   ○ Vocational program newsletters (including alumni news)
   ○ Career information
   ○ None
   ○ Other ________________________

V. ADDITIONAL COMMENTS

APPENDIX B

JURY OF EXPERTS - STUDENT QUESTIONNAIRE

Mr. James C. Curde, Assistant Director
Nave Paramedical Center
Elizabethton, Tennessee

Mr. John Seivers, Assistant Director
Johnson City Vocational School
Johnson City, Tennessee

Mr. Allen Ballard, Instructor
Nave Paramedical Center
Elizabethton, Tennessee

Mr. Lawrence Eads, Instructor
Daniel Boone High School
Jonesboro, Tennessee

Dr. John Ephraim, Professor
Industrial Education Department
East Tennessee State University
Johnson City, Tennessee

Mr. Jack Davis, Instructor
Nave Paramedical Center
Elizabethton, Tennessee

Dr. Charles Story, Professor
Industrial Education Department
East Tennessee State University
Johnson City, Tennessee

Dr. John Falls, Professor
Industrial Education Department
East Tennessee State University
Johnson City, Tennessee

APPENDIX C

TENNESSEE VOCATIONAL EMPLOYER SURVEY FORM

You now have, or may have in the past, employed a former student of a Tennessee secondary school vocational education program. Would you please help improve the program by answering the following questions.

DIRECTIONS FOR MARKING ANSWERS

- Use black lead pencils (No. 2½ or softer).
- Make heavy marks that fill the circle completely.
- Erase completely any answer you wish to change.
- Make no stray marks on this sheet.

INCORRECT: ✓○ ∅○ ⊙○

CORRECT: ●○ ●○ ●○

1. How would you rate this employee's performance?

○ Excellent ○ Fair
○ Good ○ Poor
○ Average

2. How would you rate this employee's ability to perform assigned tasks without excessive instruction?

○ Excellent ○ Fair
○ Good ○ Poor
○ Average

3. How would you rate this employee on the following:

Excellent	Good	Average	Fair	Poor	
○	○	○	○	○	Work attitudes
○	○	○	○	○	Willingness to improve his/her work skills
○	○	○	○	○	Work attendance
○	○	○	○	○	Willingness to be supervised
○	○	○	○	○	Ability to work unsupervised
○	○	○	○	○	Ability to perform assigned tasks
○	○	○	○	○	Ability to work with you and other employees
○	○	○	○	○	General appearance
○	○	○	○	○	Technical ability
○	○	○	○	○	Communication ability
○	○	○	○	○	General overall abilities

4. How would you rate this employee's performance in comparison with his/her peers' who have not had Tennessee secondary school vocational training?

○ Superior ○ Average
○ Above average ○ Below average

5. Do you feel this employee should have received more high school vocational training?

○ Yes ○ No

6. Would you hire other former Tennessee secondary school vocational education students, if you have expansion or replacement needs?

○ Yes ○ No

7. Based on your experience with this employee, how would you rate his/her vocational training in the following areas:

Excellent	Good	Average	Fair	Poor	Unable to respond	
○	○	○	○	○	○	Quality of instruction
○	○	○	○	○	○	Preparation for job interview
○	○	○	○	○	○	Practical application of training to job
○	○	○	○	○	○	Reputation of program in community
○	○	○	○	○	○	Vocational shop facilities
○	○	○	○	○	○	Providing employable skills
○	○	○	○	○	○	Specialized units of instruction
○	○	○	○	○	○	Relevancy to current business or production methods
○	○	○	○	○	○	Overall vocational preparation

8. How would you rate the degree to which the local vocational program(s) instructional staff cooperate with your firm?

○ Excellent ○ Fair
○ Good ○ Poor
○ Average ○ Unable to respond

9. How would you rate the local vocational program(s) willingness to change instruction to better meet the needs of your firm?

○ Excellent ○ Fair
○ Good ○ Poor
○ Average ○ Unable to respond

10. What services do you feel should be provided by the vocational program after graduation? (Mark one or more of the following.)

○ Continuous job placement services
○ Continuing vocational education
○ Career information
○ None
○ Other (Specify) ______________________

11. Does the vocational program(s) in your area provide job placement?

○ Yes ○ No ○ Do not know

If yes, does your firm make use of them?

○ Yes ○ No

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APPENDIX D

JURY OF EXPERTS - EMPLOYER QUESTIONNAIRE

Modern Auto Parts, Inc.	1720 West Market, Johnson City, TN 37601
North Side Hospital	401 Princeton Road, Johnson City, TN 37601
Washington Farmers Cooperative	Depot, Jonesboro, TN 37659
Washington County Agriculture Extension Office	Court House, Jonesboro, TN 37659
East Tennessee State University Cooperative Education	Johnson City, TN 37601
General Shale	Broadway Street, Johnson City, TN 37601
Central Paper and Supply	101 Lafe Cox Drive, Johnson City, TN 37601

APPENDIX E

EAST
TENNESSEE STATE UNIVERSITY
JOHNSON CITY, TENNESSEE 37601

COLLEGE OF EDUCATION
Department of Industrial Education

February 16, 1978

Dear Former Vocational Student:

CONGRATULATIONS! You have been selected to help evaluate Tennessee's vocational education program. In the near future you will be getting a survey form that will allow you to express your feeling about the high school program in which you participated. It is very important that we have your opinion.

In order to get the form to you promptly, we need to confirm your current mailing address. Please print your correct address on the enclosed card and drop it in the mail. If your current address is the same as the one to which this letter was mailed, print "same" on the card.

Thank you for your help.

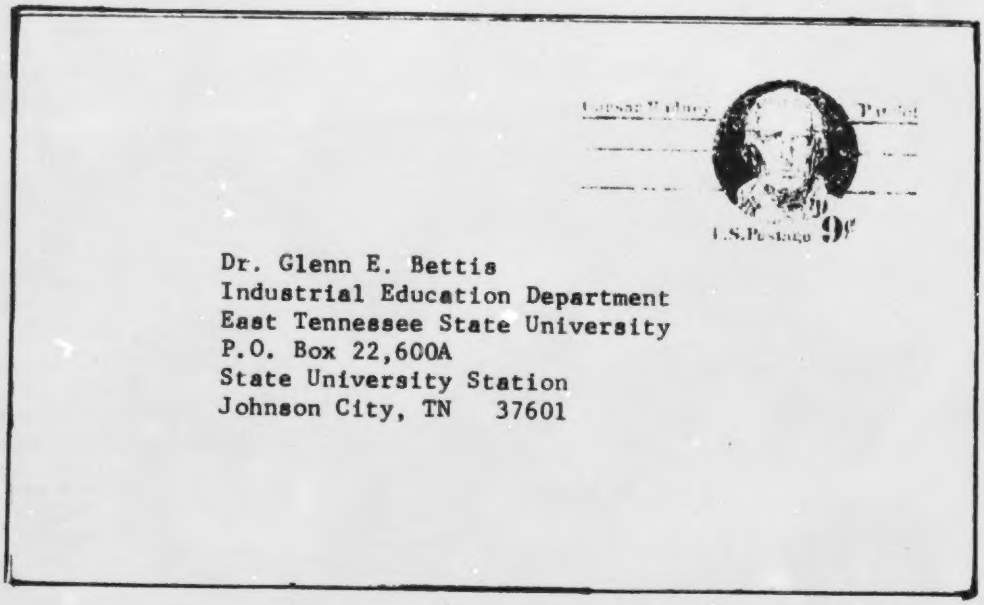
Sincerely,

Glenn E. Bettis

Glenn E. Bettis
Follow-up Study Co-Director

GEB:dk
Enclosure

APPENDIX F


U.S.Postage 9¢

Dr. Glenn E. Bettis
Industrial Education Department
East Tennessee State University
P.O. Box 22,600A
State University Station
Johnson City, TN 37601

CURRENT MAILING ADDRESS

Name ______________________________

Street, Rural Route,
and/or P.O. Box ______________________

City ______________________________

State ______________________________

Zip Code ___________________________

APPENDIX G

STATE OF TENNESSEE
DEPARTMENT OF EDUCATION
Division of Vocational-Technical Education
200 CORDELL HULL BUILDING
NASHVILLE 37219

March 15, 1978

Dear Former Vocational Student:

We are seeking your participation in a survey of former students of Tennessee secondary vocational education programs. The results of this study will be used to help evaluate the effectiveness of the vocational programs and, in turn, give us valuable information needed to improve them.

Former students and present employers are the people who can best supply the needed information. As a former student, your opinion is essential to this evaluation. Enclosed is a confidential survey form (A) which asks for your opinion of the program you participated in and information concerning your work experience since leaving the program. The second enclosed form (B) is an employer address form. We need to survey employers in order to gain their evaluation. You may be assured that your individual responses will be kept strictly confidential.

Please complete the two forms and return them in the enclosed postage paid envelope. I am confident that you want our vocational programs to be the best and will respond immediately.

May I take this opportunity to thank you, in advance, for your help and support.

Sincerely yours,

John Leeman

John Leeman
Assistant Commissioner

APPENDIX H

Industrial Education Department
East Tennessee State University
Johnson City, TN 37601

Dear Former Vocational Student:

We appreciate your help in our Survey of Former Tennessee Vocational Students. It is only you, the former student, who can supply the information which is essential to the success of this study.

If you have already mailed your questionnaire, thanks for taking the time to help. If not, please take a few minutes to complete and mail it today.

Research Project Staff

APPENDIX I

Student Survey Phone Follow-Up

A phone follow-up was conducted in May and June. This follow-up was made after the mailing of the reminder cards. All those non-respondents whose phone numbers could be obtained by use of phone books and telephone company information service were called.

Results of the phone follow-up was shown in Figure I-1 . For the 1971-1972 group a total of 242 telephone numbers were found. Approximately 40 per cent of numbers were not reached because of disconnection, wrong number, busy, or no answer. Of those numbers reached the highest per cent (19.8) was where contact was made with a member of the family who said they would tell the former student. Forty-four former students (18.1 per cent of the total numbers called) said they did not have the survey form and asked that another be sent. There were 13.2 per cent of those called who said that they had the form and would return it.

There was a small group of those called, 1.2 per cent, who did not want to complete the form, and 1.2 per cent who said they had never been in a vocational program. Relatives of 3.7 per cent said that the former student had moved and that they would forward it to the new address. There was one former student who was crippled and unable to fill out the form.

There was a return of 12.8 per cent from the 242 phone calls made, or 21.2 per cent of the correct numbers reached.

The total number of calls made for the 1975-1976 year group was 265. Of this total about 32 per cent of the numbers were either disconnected, wrong numbers, busy or there was no answer. Relatives said they would inform the former student in 24.5 per cent of the calls made. Fifty-five of the former students contacted asked that another survey form be sent, this was 20.7 per cent of the total number called. Those reached who said they would return the form was 14.3 per cent.

Only five of the former students reached said that they did not want to complete the survey form while four others said they had not been in a vocational program. These two responses constituted 1.8 and 1.5 per cent respectively of the total called. Relatives of 2.6 per cent of those called said that they would forward the form to the former student. There were two former students who were deceased and one unable to respond because he was crippled.

There was a return of 15.0 per cent from the 265 phone calls made, or 22.0 per cent of the correct numbers reached.

STUDENT SURVEY PHONE ANALYSIS

Phone Responses	1972	Per Cent	1976	Per Cent
Member of Family will Tell	48	19.8	65	24.5
Send Another	44	18.1	55	20.7
Do Not Want to Complete	3	1.2	5	1.8
Returned	6	2.5	4	1.5
No Vocational	3	1.2	4	1.5
Will Return	32	13.2	38	14.3
Member of Family will Forward	9	3.7	7	2.6
Crippled	1	.4	1	.4
Deceased	0	0	2	.9
Disconnected	16	6.7	10	3.8
No Answer	31	12.8	34	12.9
Busy	14	5.8	13	4.9
Wrong Number	35	14.5	27	10.2
Total	242	100.0	265	100.0
Total Received	31	12.8	40	15.0

FIGURE I-1

APPENDIX J

TENNESSEE VOCATIONAL STUDENT SURVEY: FORM B

DIRECTIONS. Use black lead pencils (No. 2½ or softer). Make heavy marks that fill circle completely. Erase clearly any answer you wish to change. Make no stray marks on this sheet. Print the information requested in the box provided above the grids. Fill in the grid of circles so that one black dot will identify the letter in the box at the top of each column.

NAME OF FIRM YOU ARE PRESENTLY EMPLOYED BY:

○ A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

NAME OF IMMEDIATE SUPERVISOR ○ MR ○ MS ○ DR

○ A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

Please Print Your FULL NAME.

FIRM'S ADDRESS Street City State

○ Rural Rt. #
○ P.O. Box #
○ Street #

0 1 2 3 4 5 6 7 8 9

○ A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

Zip Code

0 1 2 3 4 5 6 7 8 9

NCS Trans-Optic F5244-54321

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APPENDIX K

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STATE OF TENNESSEE
DEPARTMENT OF EDUCATION
Division of Vocational-Technical Education
200 CORDELL HULL BUILDING
NASHVILLE 37219

April 27, 1978

Mr. John Doe
Hayes Trucking Company
777 West Seventh
Johnson City, TN 37601

Dear Mr. Doe:

We are seeking your participation in a survey of former students of Tennessee secondary vocational education programs. The results of this study will be used to help evaluate the effectiveness of the vocational programs and, in turn, give us valuable information needed to improve them.

Former students and present employers are the people who can best supply the needed information. As an employer of former Tennessee vocational students, your opinion is essential to this evaluation. Enclosed is a confidential survey form which asks for your evaluation based on the performance of one or more former students that have been in your employ.

Responses will not be identified with individual firms, nor used to evaluate individual employees; but rather, the data collected will be presented as a general assessment of Tennessee secondary vocational education programs.

Please complete the survey form and return it in the enclosed postage paid envelope. I am confident that you want our vocational programs to be the best and will respond immediately.

May I take this opportunity to thank you, in advance, for your help and support.

Sincerely yours,

John Leeman

John Leeman
Assistant Commissioner

APPENDIX L

Industrial Education Department
East Tennessee State University
Johnson City, TN 37601

Mr. John Doe
Hayes Trucking Company
777 West Seventh
Johnson City, TN 37601

Dear Mr. Doe:

We appreciate your help in our Survey of Former Tennessee Vocational Students. It is only you, the employer, who can supply the information which is essential to the success of this study.

If you have already mailed your questionnaire, thanks for taking the time to help. If not, please take a few minutes to complete and mail it today.

Research Project Staff

APPENDIX M

Employer Survey Phone Follow-Up

During the first few weeks of June, a phone follow-up of the non-respondents was conducted. The results of this follow-up are shown in Figure M-1 .

There were survey forms sent to 73 of the 1971-1972 employers and of this number 32 were called in the phone follow-up. Of those called, six (18.8 per cent) were not reached due to no answer. In one case a recorded message was reached. The two responses with the highest percentage were both 25.0 per cent of the total called. These two responses were those who said they would mail the completed questionnaire and those who asked that another copy be sent.

In five cases, 15.7 per cent, the person called was out of the office. Those who responded that they had already mailed the form and those who did not employ former vocation students both equaled 6.2 per cent. Of those employers called, 28.1 per cent returned the completed survey form.

Fifty-seven calls were made to non-respondent employers of the 1975-1976 group. This was out of a total of 92 employers. A total of 26.3 per cent of those called said they would complete the form and mail it back. Of those contacted 22.8 per cent asked that another form be sent. There were 10 employers, 17.5 per cent, who were out of the office. Two of the employers responded that they had no time to fill out the questionnaire.

Only 5.3 per cent had already mailed back the form. Approximately 16 per cent of those called resulted in no answers and recorded messages. There were 8.7 per cent who said they have not employed former vocational students.

For the 57 calls made there was a return rate of only 17.5 per cent.

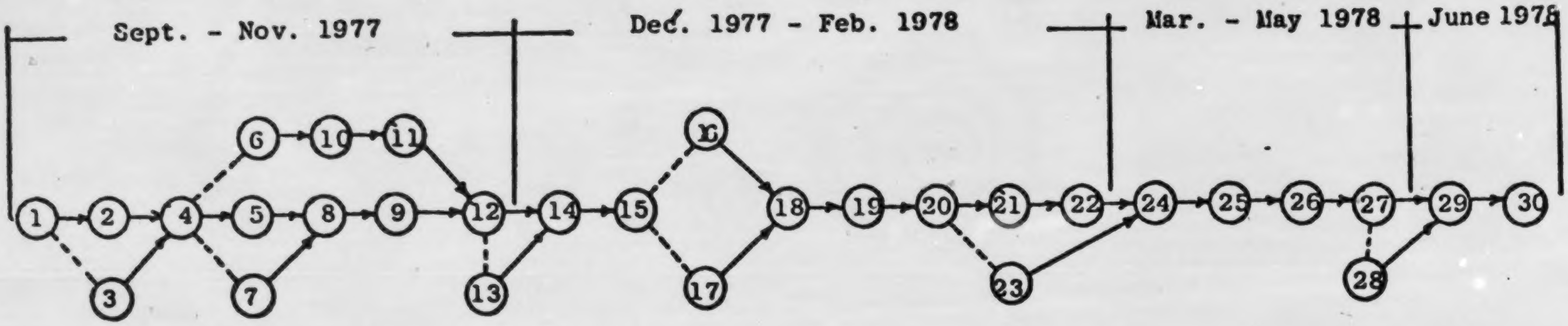
EMPLOYER SURVEY PHONE ANALYSIS

Phone Responses	1972 Number Answering	Per Cent of total called	1976 Number Answering	Per Cent of total called
Send Another	8	25.0	13	22.8
Out of Office	5	15.7	10	17.5
Will Mail	8	25.0	15	26.3
Have Not Employed Vocational Education	2	6.2	5	8.7
No Time to Fill Out	0	0	2	3.5
Already Mailed	2	6.2	3	5.3
Recording Message	1	3.1	3	5.3
No Answer	6	18.8	6	10.6
Total	32	100.0	57	100.0
Total Received	9	28.1	10	17.5

FIGURE M-1

APPENDIX N

Management Plan



LEGEND

1. Start Project
2. Review related literature.
3. Obtain names and addresses of secondary vocational schools.
4. Consult with Research and Development Committee on questionnaire styles.
5. Draft instruments.
6. Obtain graduates names.
7. Develop sampling plan.
8. Give draft instruments to R & D Committee for review.
9. First revision of instruments.
10. Construct list of graduate recipients names and addresses by sampling
11. Obtain employers names and addresses.
12. Have instruments reviewed by Jury of Experts and R & D Committee
13. Write first Quarterly Report.
14. Develop Computer Program.
15. Second revision of instruments.
16. Validate instruments.
17. Establish reliability.
18. Third revision of instruments.
19. Review of instruments by R & D Committee.
20. Fourth revision of instruments (if necessary)
21. Print instruments
22. Mail instruments
23. Write second Quarterl Report.
24. Conduct mail follow-
25. Conduct telephone follow-up.
26. Analyze data.
27. Prepare data for presentation.
28. Write third Quarterly Report.
29. Write Final Report.
30. End Project.

APPENDIX O

VOCATIONAL–TECHNICAL STUDENT FOLLOW-UP

Tennessee Research Coordinating Unit
[illegible]
Knoxville, Tennessee
615 974-[illegible]

DIRECTIONS FOR MARKING ANSWERS
- Use black lead pencils only (No. 2 or softer)
- Make heavy black marks that fill the circle completely
- Erase cleanly any answer you wish to change
- Make no stray marks on this sheet

EXAMPLE
WRONG ○✓○ WRONG ○●○
WRONG ○○✗ RIGHT ○○●

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DO NOT MARK ABOVE THIS LINE

If the information above is incorrect, clip an explanatory note to this form before returning it. Below is a roster of the students reported in your classes last year. Mark the circles to the right of each name which correspond to the student's status.

	EDUCATIONAL STATUS				PROGRAM STATUS		EMPLOYMENT STATUS						
STUDENT'S NAME	Still in High School	Dropped out of High School	Graduated	Continuing Education at a Higher Level	Left Prior to Normal Completion	Completed Program	Unknown	Military	Employed Full Time Related	Employed Full Time Unrelated	Employed Part Time	Known to be Unemployed	Known to be Not Seeking Employment
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APPENDIX P

STUDENT VOCATIONAL PROGRAM TERMINATION FORM

PRINT
Name:______________________________ Social Security No. _____ ___ _____

Sex: _____Male _____Female Tennessee Driver's License No. _______________

Permanent Address: ____
____

Parent or Guardian:____
(Name & Address)
____
____

Telephone No.: _______________ Parent/Guardian Telephone No. _______________

Racial/Ethnic Designation:

_____American Indian or Alaskan Native
_____Asian American or Pacific Islander
_____Black, not of Hispanic Origin
_____Hispanic
_____White, not of Hispanic Origin

Employment Status (if employed, give employer name and address):

____
____
____

Program Area:

_____Agriculture (01.0000)
_____Distributive (04.0000)
_____Health Occupations (07.0000)
_____Home Economics (09.0000)
_____Industrial Arts (10.0000)
_____Office Occupations (14.0000)
_____Technical Education (16.0000)
_____Trade & Industry (17.0000)
_____Special Programs (99.0000)

Completion Status:

_____Completed program
_____Left program prior to completion, completed more than 50% of the program.
_____Left program prior to completion, completed at most 50% of the program.
_____Transferred to another vocational program.

Handicapped Status:

_____Handicapped _____Not Handicapped

APPENDIX Q

STUDENT AND EMPLOYER FOLLOW-UP REPORTS

All data requested to be reported on this form is mandatory for 1978-79 collection EXCEPT for that in shaded areas which is voluntary for 1978-79. In subsequent years, those data items will be mandatory also.

Follow-up Universe - Not all students that were reported in the Program Enrollment and Termination Report (NCES 2404) will be subject to follow-up. The follow-up universe consists only of completers and leavers of those programs contained in Part A of the Program Enrollment and Termination Report (also limited to those programs covered by the State Plan). Transfers, as shown in Part A, Section VI(2) of NCES 2404, are not included in the follow-up universe. Furthermore, the universe is restricted to high school students, postsecondary (AA) students, and adult students enrolled in long-term programs (at least 500 contact hours in length). Adults in short-term programs are not included in the follow-up universe. The underlined terms are defined in the instructions accompanying NCES 2404.

With respect to the employer universe, employer follow-up forms shall be sent only to the employers of those students who indicated that they were employed (either civilian or military) in the Student Follow-up Form (NCES 2404-5).

Timing - Students in the Follow-up Universe, as described above, in reporting year Y will be followed up in reporting year Y + 1. That is, the follow-up for 1979-80 will will relate to those students who completed or left the program in 1978-79. Thus, such a student's enrollment would be reflected in form NCES 2404 for 1978-79 and his or her employment status would be reflected in the Student Follow-up Report in 1979-80. As has been the case in recent years, the student follow-up activities should be conducted in February of the appropriate fiscal year.

Use of Sampling - Two forms of sampling will be permitted in the VEDS Follow-up Component. First, a State may elect to partition its school districts and postsecondary institutions (LEA/PSI's) into a maximum of five groups of LEA/PSI's. The State may then restrict its follow-up activities to one group of LEA/PSI's per year, rotating to the next group in the next year so that in at most a five year cycle, each LEA/PSI will have been included in the follow-up activities. The adoption of this strategy is subject to the following restrictions:

1. Each group of LEA/PSI's must have approximately the same total number of "Part A enrollments", where "Part A enrollments" refer to the enrollments in programs listed in Part A of the Program Enrollment and Termination Report. (See attached stub.) That is, if the State elects to partition its LEA/PSI's into five groups, then each group shall account for approximately 20 percent of the total "Part A enrollments". If the State elects to partition its LEA/PSI's into four groups, then each group shall account for approximately 25 percent of the total "Part A enrollments", and so on.
2. In so far as possible under the constraint above, each group shall have approximately the same enrollments in each Part A program. It is realized that this is only somewhat possible in light of the above restriction.
3. (IMPORTANT) Before any State can adopt this strategy (which allows for the follow-up of less than the total follow-up universe in each year), that State must submit a technical sampling plan to NCES and receive approval in writing from NCES for that plan. The plan must contain the following:
    - a. A list of the LEA/PSI's in each group;
    - b. The total enrollment of each "Part A" program for each group for the most recent year;
    - c. Which group(s) is going to be followed up in which year(s);

   d. A rationale for how the groups were determined; and

   e. A discussion of the degree to which each group is representative of the State.

4. The intent in permitting this extensive use of sampling is to reduce the cost and effort required to conduct the follow-up activities. The trade-off that NCES expects is that those States adopting a plan which includes less than the total universe each year will devote extra attention to obtaining quality data with acceptably high response rates. Therefore, if a State adopting a sampling approach does not maintain an acceptably high student reponse rate, NCES may require that that State follow-up a larger number of completers/leavers in subsequent years. That is, the State may be required to reduce the number of groups, thereby increasing the size of each group.

The second form of sampling occurs with respect to those leavers who completed at most half (50 percent) of the program. Specifically, within the group of LEA/PSI's which is to be followed up in the current year, the following completers and leavers must be followed up:

1. All completers;
2. All leavers who completed more than 50 percent of the program; and
3. Ten percent (one in ten) of the leavers who completed at most 50 percent of the program. The students in this category who become a part of the 10% sample shall be selected in a statistically acceptable manner (e.g., strictly random, every tenth student, students with Social Security Account numbers ending in a certain digit, etc.). (NOTE: In States with very large numbers of enrollments, less than a 10% follow-up of this category may be approved by NCES.)

Source of Required Data Items - Relatively few data items drive the entire Follow-up Component of VEDS. These items are gathered from three sources:

1. The Student Base Data (BD), which is the record maintained on the student in order to complete the Program Enrollment and Termination Report;
2. The Student Follow-Up Form (SFU), NCES 2404-5; and
3. The Employer Follow-Up Form (EFU), NCES 2404-6.

The specific items required and their sources, using the abbreviations above for the sources, are shown in Figure 1. Base Data items are described below. Instructions for the Student Follow-Up Form (NCES 2404-5) and the Employer Follow-Up Form (NCES 2404-6) are provided is subsequent sections.

Description of Base Data (BD) Items Required - The individual definitions which apply to the Base Data items are provided with the Program Enrollment and Termination Report (NCES 2404). The actual categories which are needed for each item are provided below:

1. Racial/Ethnic Designation
    - American Indian or Alaskan Native
    - Asian American or Pacific Islander
    - Black, not of Hispanic Origin
    - Hispanic
    - White, not of Hispanic Origin

2. Sex
    - Female
    - Male

3. Instructional Program
    - OE Program Code (Six-digit) (See attached stub.)

4. Handicap Status
    - Handicapped
    - Not Handicapped

5. Level of Program
    - High School
    - Postsecondary (AA)
    - Adult (long-term programs only)

6. Completion Status
    - Completed program
    - Left program prior to completion, completed more than 50% of the program
    - Left program prior to completion, completed at most 50% of the program

FIGURE 1: FOLLOW-UP COMPONENT DATA ITEMS AND SOURCES

Data Item	Source
1. Racial/Ethnic Designation	BD
2. Sex	BD
3. Instructional Program	BD
4. Handicap Status	BD
5. Level of Program	BD
6. Completion Status	BD
7. Education Status	SFU
8. Employment Status	SFU
9. Employer and Supervisor (for EFU mailing)	SFU
10. Job Title	SFU
11. Job Duties	SFU
12. Job Relatedness to Training	SFU
13. Current Hourly Salary	SFU
14. Employer Rating of Training (3 questions/5 items)	EFU

STUDENT FOLLOW-UP REPORT

The Student Follow-Up Report (NCES 2404-7) is divided into four parts. Part A describes the employment status of the follow-up sample by instructional program. Part B describes the employment status of the follow-up sample by racial/ethnic designation and sex. Part C describes the employment status of those individuals in the follow-up sample who are handicapped. Finally, Part D presents, for each program, the field of employment and average hourly salary of those individuals in the follow-up sample who were employed.

The Student Follow-Up Report is completely driven by the Base Data, described earlier, and the Student Follow-Up Form (NCES 2404-5). Before presenting specific instructions for each part of the Student Follow-Up Report, the Student Follow-Up Form must be described.

Description of the Student Follow-Up Form (SFU) Items Required - The SFU form is fundamentally self-explanatory. Additional notes are provided below:

1. Education Status - The Student Follow-Up Report does not differentiate between attending school full-time and attending school part-time. The full-time/part-time split in the SFU is included for State use, if desired. States not wishing to utilize this split in their own analyses of the results may revise the form to include only two responses.
2. Employment Status - Self-explanatory.
3. Employer, Supervisor, Job Title, and Job Duties - The employer and supervisor information is not needed for the Student Follow-Up Report, but is necessary to determine the recipient of the Employer Follow-Up Form

(NCES 2404-6). The information on job title and job duties is needed for Part D of the Student Follow-Up Report. As is described later, this information is to be recoded into a two-digit Standard Occupational Classification (SOC) code. (List of reporting codes is attached.)

4. Job Relatedness to Training - A Minnesota study indicated that the individual's identification of relatedness seems to be as valid as any existing procedure for determining relatedness. State officials may wish to consider the individual's statement of job title and job duties as an additional indication of relatedness, however.
5. Current Salary - Part D of the Student Follow-Up Report requires the average hourly salary of employed individuals by instructional program. Since many individuals know their salary by measures other than hourly (e.g., monthly, annually), NCES recommends that States use the format provided. This information can be converted to hourly salary by using the data in items 5 and 6, applying the relationship: 1 year = 12 months = 52 weeks.
6. Hours Employed per Week - Self-explanatory.

Upon receipt of the SFU from the former student, the information should be linked to the Base Data for that individual. If the former student does not return the SFU, this should be reflected in the linked record by defining the individual's education and employment status as "Unknown". The remaining items would then be left blank.

NOTE: NCES will not be issuing the Student Follow-Up Form (NCES 2404-5) to the States, but rather will allow the States to design their own forms. This allows the States which gather more extensive information from former students to use their own forms. The items in NCES 2404-5 must be a part of each State's Student Follow-Up Form, however.

Student Follow-Up Report - Part A

Part A of NCES 2404-7 requests information on the employment status of the follow-up sample for each instructional program. One matrix summarizes the results of program completers, one matrix tallies the results for program leavers who completed more than 50 percent of the program, and the final matrix (containing only one row) summarizes the results for program leavers who completed at most 50 percent of the program. This third matrix aggregates all programs into a single row.

The information in the Part A matrices represents the actual counts of the follow-up results. The sum of the entries in each row (which corresponds to a given program) should equal the total number of students in the follow-up sample for that program. As an example, suppose that the LEA/PSI's being followed up in 1979-80 had the following numbers of completers and leavers in 1978-79:

	Agricultural Production	Total "Part A" Programs
Completers	32	839
Leavers (completing more than 50% of program)	13	251
Leavers (completing at most 50% of program)	3	97

Then the following relationships would hold (assuming no deaths):

1. The sum of the entries in the Agricultural Production row in Part A (1) would equal 32.
2. The sum of all of the entries in Part A (1) would equal 839.
3. The sum of the entries in the Agricultural Production row in Part A (2) would equal 13.
4. The sum of all of the entries in Part A (2) would equal 251.
5. The sum of all of the entries in Part A (3) would be approximately 10. (This is based on the total of 97, with 10% of that total in the follow-up sample.)

Exactly one tally should appear for each student in the follow-up sample. If the individual completed the program, the tally would occur in Part A (1), and so forth. (Thus, this part of VEDS lends itself to manual production, if desired.) The row of the entry is determined by the program in which the former student was enrolled, except for Part A (3) where all individuals are entered in the same row. The column is determined by the education status item, the employment status item, and the relatedness item in the SFU Form. Numbering the eight columns in Part A in order as (1) through (8), the translation from these items to column number is shown in Figure 2.

Note that all non-respondents, including those who were not sent a form because they could not be located, are entered in Column (8): "Status Unknown". If a student in the follow-up sample has died, no entry should be made in any row or column for that individual.

FIGURE 1: TRANSLATION FROM EDUCATION AND EMPLOYMENT STATUS AND RELATEDNESS TO PART A COLUMN NUMBER

Education Status / Employment/ Relatedness	Currently Attending School	Not Attending School	Status Unknown
Employed (Civilian)/ Related to Training	(1)	(1)	(1)
Employed (Civilian)/ Not Related to Training	(5)	(3)	(8)
Full-time Military/ Related to Training	(2)	(2)	(2)
Full-time Military/ Not Related to Training	(5)	(4)	(8)
Unemployed (Seeking Employment)	(5)	(6)	(8)
Not in Labor Force	(5)	(8)	(8)
Status Unknown	(8)	(8)	(8)

Student Follow-Up Form - Part B

Part B of NCES 2404-7 is similar to Part A except that it focuses on racial/ethnic designation and sex rather than on instruction programs. Again, exactly one tally should appear for each student in the follow-up sample. The row is determined by the racial/ethnic/sex designation of the individual. The column is determined as in Part A. (See Figure 2 above.)

Student Follow-Up Report - Part C

Part C of NCES 2404-7 summarizes the follow-up results of handicapped completers and leavers. Each such former student should be entered in the column determined in Figure 2 above.

Student Follow-Up Report - Part D

Part D of NCES 2404-7 shows the field of employment for those follow-up respondents who indicated that they were 1) employed (including military) in a field related to their training, or 2) employed (including military) in a field not related to their training and not pursuing additional training. That is, the total of the entries in Part D (excluding the "Average Hourly Salary" column) should equal the sum of columns (1) through (4) of Part A or Part B. The row of the tally is determined by an evaluation of the individual's employer, job title, and job duties (from the SFU Form). The occupation should be coded into two-digit Standard Occupational Classification (SOC) categories. A list of the occupation stub for Part D is attached. (NOTE: For additional information on the SOC, see Standard Occupational Classification Manual 1977, Government Printing Office, Stock No. 041-001-00153-1.)

For the "Average Hourly Salary" column, the hourly salary should be calculated for each individual in the row. The arithmetic mean of these hourly salaries (in each row) should then be entered in the "Average Hourly Salary" column for that row.

EMPLOYER FOLLOW-UP REPORT

The Employer Follow-Up Report (NCES 2404-8) is divided into three parts. Part A summarizes the mean employer ratings by instructional program of the former student. Part B looks at the average ratings by racial/ethnic designation and sex of the former student. Finally, Part C presents average employer ratings by the level of the program and the completion status of the former student.

The Employer Follow-Up Report is driven by the Base Data, described earlier, and the Employer Follow-Up Form (NCES 2404-6). The Employer Follow-Up Form is described in the next paragraph.

Description of the Employer Follow-Up Form (EFU) Items Required - With the exception of the code number in the upper right-hand corner of NCES 2404-6, the form is completely self-explanatory. The code number is an eight-digit number which provides the following demographic information about the former student:

1. Racial/Ethnic Designation and Sex (first digit of code)

    0 - Male American Indian or Alaskan Native
    1 - Female American Indian or Alaskan Native
    2 - Male Asian American or Pacific Islander
    3 - Female Asian American or Pacific Islander
    4 - Male Black, not of Hispanic origin
    5 - Female Black, not of Hispanic origin
    6 - Male Hispanic
    7 - Female Hispanic
    8 - Male White, not of Hispanic origin
    9 - Female White, not of Hispanic origin

2. Level of Program and Completion Status (second digit of code)
    1 - Completer (HS)
    2 - Completer (PS)
    3 - Completer (Adult)
    4 - Leaver, completed more than 50% of program (HS)
    5 - Leaver, completed more than 50% of program (PS)
    6 - Leaver, completed more than 50% of program (Adult)
    7 - Leaver, completed at most 50% of program (HS)
    8 - Leaver, completed at most 50% of program (PS)
    9 - Leaver, completed at most 50% of program (Adult)

3. Instructional Program (final six digits of code)

- OE six-digit code

By using this code, which is preprinted from the Base Data, the Employer Follow-Up Form contains all necessary demographic information without containing any student identifiers. This is very important from a privacy standpoint. It is presumed that a cover letter to the employer will be attached to NCES 2404-6 which describes the purpose of the survey and identifies the student to be rated. The employer should remove this cover letter prior to returning the completed form.

NOTE: NCES will not be issuing the Employer Follow-Up Form (NCES 2404-6) to the States, but rather will allow the States to design their own forms. This allows the States which gather more extensive information from employers of former students to use their own forms. The items in NCES 2404-6 must be a part of each State's Employer Follow-Up Form, however.

Instructions for Employer Follow-Up Report

Number of Respondents - In the first column of each part of NCES 2404-8, the number of EFU Forms that were completed and returned (which relate to the row in which the entry is being made) should be entered. That is, in Part B, if 37 forms were completed and returned on Male Hispanics, the entry in the first column of the seventh row would be 37.

Average (Mean) Ratings - In the remaining columns, the mean of the employer ratings for each item of the EFU forms should be entered. These averages should be calculated by assigning "points" to each response as indicated below:

Items 1a, 1b, 1c, and 2

5 - Very Good
4 - Good
3 - Neutral
2 - Poor
1 - Very Poor

Item 3

* - No basis for comparison
5 - Individual is better prepared
3 - Both are about the same
1 - Individual is less prepared

* Do not include these marks in figuring average

After "scoring" each item for each individual in this way, add the scores together and divide by the number of scores which were added. Note that with Item 3 (Relative Preparation), you should not include those forms in which the "No basis for comparison box was checked in determining the mean rating.

The means, once calculated, should be entered in the appropriate rows and columns of the various parts of NCES 2404-8.

STUDENT FOLLOW-UP FORM

NOTE: This report is authorized by law (20 USC 2312 and 20 USC 2391). While you are not required to respond to this survey, your cooperation is needed to insure that the results of this effort are comprehensive, reliable, and timely.

1. What is your current education status? (check one)
   - ☐ Currently attending school full-time
   - ☐ Currently attending school part-time
   - ☐ Not currently attending school
2. What is your current employment status? (check one)
   - ☐ Employed (Includes all employment, even if below your qualifications; does not include full-time military service.)
   - ☐ Full-time military service
   - ☐ Unemployed (Not employed, but actively seeking employment.)
   - ☐ Not in the labor force (Not employed and not seeking employment because of choice, illness, full-time student status, retirement, pregnancy, or other such reason.)

NOTE: If you are currently employed, please answer the remaining questions. Otherwise, skip the remaining items.

3. Please provide the following information on your present job:

[illegible] employed, please write self)

[illegible] Address

[illegible] State Zip Code

[illegible]

[illegible] Time

[illegible]

[illegible]

[illegible]

NCES Form 2404-5

(Continued on reverse side)

4. Is this job related to your field of vocational training?

☐ Yes, it is directly or closely related

☐ No, it is only remotely related or is not related at all

5. What is your current salary?

$____________ per ____________

6. The salary in the preceding item is based on how many hours per week employment?

____________ hours per week

Thank you very much for your cooperation. Please return this form in the enclosed envelope.

__ __ __ __ . __ __ __ __

FOR NCES USE ONLY

EMPLOYER FOLLOW-UP FORM

NOTE: This report is authorized by law (20 USC 2312 and 20 USC 2391). While you are not required to respond to this survey, your cooperation is needed to insure that the results of this effort are comprehensive, reliable, and timely. This form contains no student-identifiable information. The code number in the upper right-hand corner contains information of the program in which the individual was enrolled, the level of the program, and other demographic information which will allow vocational educators to evaluate the effectiveness of their programs. No part of the code contains student identifiers. Please remove the cover letter before returning this form.

1. Please rate the vocational training received by the individual in the following areas:

	Very Good	Good	Neutral	Poor	Very Poor
a. Technical knowledge	☐	☐	☐	☐	☐
b. Work attitude	☐	☐	☐	☐	☐
c. Work quality	☐	☐	☐	☐	☐

2. What is your overall rating of the vocational training received by this individual as it relates to the requirements of his or her job?

Very Good	Good	Neutral	Poor	Very Poor
☐	☐	☐	☐	☐

3. As a result of this person's vocational training, how would you rate his or her preparation in relation to other employees in his or her work group who did not receive such training?

☐ No basis for comparison
☐ Individual is better prepared
☐ Both are about the same
☐ Individual is less prepared

NCES Form 2404-6

STUDENT FOLLOW-UP REPORT

PART A (1): EMPLOYMENT STATUS (FOLLOW-UP) BY INSTRUCTIONAL PROGRAM (COMPLETERS ONLY)

Instructional Program	Employed in a Field Related to Training						Employed in a Field Not Related to Training, Not Pursuing Additional Education						Pursuing Add'l Educ. (Employed in Field Not Related to Trng., Not in Labor Force, or Unempl.)			Unemployed (Seeking Employment) and Not Pursuing Additional Education			Not in Labor Force and Not Pursuing Add'l Education			Status Unknown		
	Civilian			Military			Civilian			Military														
	HS	PS	Adult	HS	PS	Adult	HS	PS	Adult	HS	PS	Adult	HS	PS	Adult	HS	PS	Adult	HS	PS	Adult	HS	PS	Adult
SEE ATTACHED LAYOUT OF STUB																								
ther (Specify if ore than 1%)																								
ther (Less than 1% of Total)																								

NOTE: "Adult" refers to adults in long-term (500 contact hours) programs only

PART A (2): EMPLOYMENT STATUS (FOLLOW-UP) BY INSTRUCTIONAL PROGRAM (LEAVERS WHO COMPLETED OVER HALF OF THE PROGRAM)

Instructional Program	Employed in a Field Related to Training						Employed in a Field Not Related to Training, Not Pursuing Additional Education						Pursuing Add'l Educ. (Employed in Field Not Related to Trng., Not in Labor Force, or Unempl.)			Unemployed (Seeking Employment) and Not Pursuing Additional Education			Not in Labor Force and Not Pursuing Add'l Education			Status Unknown		
	Civilian			Military			Civilian			Military														
	HS	PS	Adult	HS	PS	Adult	HS	PS	Adult	HS	PS	Adult	HS	PS	Adult	HS	PS	Adult	HS	PS	Adult	HS	PS	Adult
SEE ATTACHED LAYOUT OF STUB																								
Other (Specify if more than 1%)																								
Other (Less than 1% of Total)																								

NOTE: "Adult" refers to adults in long-term (500 contact hours) programs only

NCES 2404-7

STUDENT FOLLOW-UP REPORT

PART A (3): EMPLOYMENT STATUS (FOLLOW-UP) - (LEAVERS WHO COMPLETED AT MOST HALF OF THE PROGRAM)

Instructional Program	Employed in a Field Related to Training		Employed in a Field Not Related to Training, Not Pursuing Additional Education		Pursuing Add'l Educ. (Employed in Field Not Related to Trng., Not in Labor Force, or Unempl.)	Unemployed (Seeking Employment) and Not Pursuing Additional Education	Not in Labor Force and Not Pursuing Add'l Education	Status Unknown
	Civilian	Military	Civilian	Military				
TOTAL								

PART B: EMPLOYMENT STATUS (FOLLOW-UP) BY RACIAL/ETHNIC/SEX DESIGNATION

Racial/Ethnic/Sex Category		Employed in a Field Related to Training		Employed in a Field Not Related to Training, Not Pursuing Additional Education		Pursuing Add'l Educ. (Employed in Field Not Related to Trng., Not in Labor Force, or Unempl.)	Unemployed (Seeking Employment) and Not Pursuing Additional Education	Not in Labor Force and Not Pursuing Add'l Education	Status Unknown
		Civilian	Military	Civilian	Military				
American Indian/ Alaskan Native	M								
	F								
Asian American/ Pacific Islander	M								
	F								
Black, Non-Hispanic	M								
	F								
Hispanic	M								
	F								
White, Non-Hispanic	M								
	F								

PART C: EMPLOYMENT STATUS (FOLLOW-UP) OF HANDICAPPED STUDENTS

Instructional Program	Employed in a Field Related to Training		Employed in a Field Not Related to Training, Not Pursuing Additional Education		Pursuing Add'l Educ. (Employed in Field Not Related to Trng., Not in Labor Force, or Unempl.)	Unemployed (Seeking Employment) and Not Pursuing Additional Education	Not in Labor Force and Not Pursuing Add'l Education	Status Unknown
	Civilian	Military	Civilian	Military				
TOTAL								

NCES 2404-7

STUDENT FOLLOW-UP REPORT

PART D: FIELD OF EMPLOYMENT AND AVERAGE SALARY BY INSTRUCTIONAL PROGRAM *

Instructional Program	Current Employment by Occupation				Average Hourly Salary
	Management Related Occupations	Computer, Mathematical, and Operations Res.	Registered Nurses	(2-digit SOCs)	
SEE ATTACHED					
LAYOUT					
OF STUB					
Other (Specify if more than 1%)					
Other (Less than 1% of total)					

* Include data for individuals who were "Employed in a Field Related to Training" or "Employed in a Field Not Related to Training, Not Pursuing Additional Training" only.

NCES 2404-7

TWO-DIGIT STANDARD OCCUPATIONAL CLASSIFICATION (SOC) CODE STUB FOR NCES 2404-7, PART D

14	Management Related Occupations
17	Computed, Mathematical, and Operations Research Occupations
29	Registered Nurses
30	Pharmacists, Dieticians, Therapists, and Physician's Assistants
32	Writers, Artists, Performers, and Related Workers
36	Health Technologists and Technicians
37	Engineering and Related Technologists and Technicians
38	Science Technologists and Technicians
39	Technicians: Except Health, Engineering, and Science
41	Sales Occupations, Commodities
42	Insurance, Real Estate, and Service Sales Occupations
45	Supervisors: Clerical Occupations *
46-47	Clerical Occupations, Except Equipment Operators *
48	Computing and Office Equipment Operators
51	Protective Service Occupations
52	Service Occupations, Except Private Household and Protective
55	Farm Operators and Managers
57	Forestry and Logging Occupations
58	Fishers, Hunters, and Trappers
61	Construction Trades
64-65	Transportation and Material Moving Occupations
67	Mechanics and Repairers
72	Precision Production Occupations
77	Fabricators, Assemblers, and Hand Working Occupations
99	Occupations Not Elsewhere Classified

* Note: The American Vocational Association (AVA) has taken exception to the use of the term "Clerical" in these titles. These concerns are being transmitted to the Office of Management and Budget for consideration and possible title revision.

EMPLOYER FOLLOW-UP REPORT

PART A: MEAN RATINGS BY INSTRUCTIONAL PROGRAM *

Instructional Program	Number of Respondents	Mean of Employer Ratings				
		Technical Knowledge	Work Attitude	Work Quality	Overall Rating	Relative Preparation
SEE ATTACHED						
LAYOUT						
OF STUB						
Other (Specify if more than 1%)						
Other (Less than 1% of Total)						

* Include completers and leavers who completed more than 50% of the program only.

NCES 2404-8

EMPLOYER FOLLOW-UP REPORT

PART B: MEAN RATINGS BY RACIAL/ETHNIC/SEX DESIGNATION *

Racial/Ethnic/Sex Designation		Number of Respondents	Mean of Employer Ratings: Technical Knowledge	Work Attitude	Work Quality	Overall Rating	Relative Preparation
American Indian/ Alaskan Native	M						
	F						
Asian American/ Pacific Islander	M						
	F						
Black, Non-Hispanic	M						
	F						
Hispanic	M						
	F						
White, Non Hispanic	M						
	F						

* Include completers and leavers who completed more than 50% of the program only.

PART C: MEAN RATINGS BY PROGRAM LEVEL AND COMPLETION STATUS

Program Level/ Completion Status		Number of Respondents	Mean of Employer Ratings: Technical Knowledge	Work Attitude	Work Quality	Overall Rating	Relative Preparation
Completed Program	HS						
	PS						
	Adult						
Leaver, Completed More Than 50%	HS						
	PS						
	Adult						
Leaver, Completed At Most 50%	HS						
	PS						
	Adult						

NCES 2404-8

APPENDIX R

TENNESSEE VOCATIONAL EMPLOYER SURVEY FORM

You now have, or may have in the past, employed a former student of a Tennessee secondary school vocational education program. Would you please help improve the program by answering the following questions.

DIRECTIONS FOR MARKING ANSWERS

- Use black lead pencils (No. 2½ or softer).
- Make heavy marks that fill the circle completely.
- Erase completely any answer you wish to change.
- Make no stray marks on this sheet.

INCORRECT ✓○ ⊘○ ◉○ CORRECT ●○ ●○ ●○

1. How would you rate this employee's performance?

○ Very good
○ Good
○ Neutral
○ Poor
○ Very poor

2. How would you rate this employee's ability to perform assigned tasks without excessive instruction?

○ Very good
○ Good
○ Neutral
○ Poor
○ Very poor

3. How would you rate this employee on the following:

Very good	Good	Neutral	Poor	Very poor	
○	○	○	○	○	Work attitude
○	○	○	○	○	Willingness to improve his/her work skills
○	○	○	○	○	Work attendance
○	○	○	○	○	Willingness to be supervised
○	○	○	○	○	Ability to work unsupervised
○	○	○	○	○	Work quality
○	○	○	○	○	Ability to work with you and other employees
○	○	○	○	○	General appearance
○	○	○	○	○	Technical knowledge
○	○	○	○	○	Communication ability
○	○	○	○	○	General overall abilities

4. How would you rate this employee's performance in comparison with his/her peers' who have not had Tennessee secondary school vocational training?

○ No basis for comparison
○ Individual is better prepared
○ Both are about the same
○ Individual is less prepared

5. Do you feel this employee should have received more high school vocational training?

○ Yes ○ No

6. Would you hire other former Tennessee secondary school vocational education students, if you have expansion or replacement needs?

○ Yes ○ No

7. Based on your experience with this employee, how would you rate his/her vocational training in the following areas:

Very good	Good	Neutral	Poor	Very poor	
○	○	○	○	○	Quality of instruction
○	○	○	○	○	Preparation for job interview
○	○	○	○	○	Practical application of training to job
○	○	○	○	○	Reputation of program in community
○	○	○	○	○	Vocational shop facilities
○	○	○	○	○	Providing employable skills
○	○	○	○	○	Specialized units of instruction
○	○	○	○	○	Relevancy to current business or production methods
○	○	○	○	○	Overall vocational preparation

8. How would you rate the degree to which the local vocational program(s) instructional staff cooperate with your firm?

○ Very good
○ Good
○ Neutral
○ Poor
○ Very poor

9. How would you rate the local vocational program(s) willingness to change instruction to better meet the needs of your firm?

○ Very good
○ Good
○ Neutral
○ Poor
○ Very poor

10. What services do you feel should be provided by the vocational program after graduation? (Mark one or more of the following.)

○ Continuous job placement services
○ Continuing vocational education
○ Career information
○ None
○ Other (Specify) ____________________

11. Does the vocational program(s) in your area provide job placement?

○ Yes ○ No ○ Do not know

If yes, does your firm make use of them?

○ Yes ○ No

NCS Trans-Optic F5458-54321

REFERENCES

Best, John W., *Research in Education*. New Jersey: Prentice-Hall, Inc., 1959.

California State Department of Education. *A Proposed Information Storage and Retrieval System for Reporting Job Placement Follow-Through Data*. Sacramento: Bureau of Industrial Education, June, 1967.

Cochran, William G., *Sampling Techniques* (2ed.; New York, John Wiley, 1963).

Cox, John A. and John F. Stephens, *Utah Project "Follow Up*. *Interin Report*. Utah Research Coordinating Unit. Salt Lake City, June, 1969.

Edwards, Allen L., *Techniques of Attitude Scale Construction*. New York: Appleton-Century-Crofts, Inc., 1957.

Eninger, Max U., *Report on New York State Data From a National Follow-Up Study of High School Level Technical and Industrial Vocational Graduates*. Pittsburgh: Educational Systems Research Institute, May, 1967.

Friday, Frank A., *The Elements of Probability and Sampling* (New York: Barnes & Noble, 1967).

Good, Carter V., A. S. Barr, and Douglas E. Scates. *The Methodology of Educational Research*. New York: Appleton-Century-Crofts, Inc., 1941.

Guilford, J.P., *Fundamental Statistics in Psychology and Education*. McGraw-Hill, New York, 1965.

Gunnell, James B., "Survey Research in Education." Unpublished, 1971.

Hillway, Tyrus. *Introduction to Research*. Boston: Houghton Mifflin Company, 1964.

Hoffman, Kenneth E.A., *A Computerized State Wide Follow-up System*. Emporia: Kansas Department of Education, Vocational Technical Division, June, 1971.

Jamrich, John X. and Paul L. Dressel. "Surveys and Studies of Higher Education Needs and Problems." *Evaluation in Higher Education*. By Paul L. Dressel and Associates. Boston: Houghton-Mifflin Company, 1961.

Johnson, Palmer, *Modern Sampling Methods* (Minneapolis: University of Minneapolis Press, 1959).

Kish, Leslie, *Survey Sampling* (New York: John Wiley, 1965).

Little, J. Kenneth and Richard W. Whinfield. *Follow-Up of 1965 Graduates of Wisconsin Schools of Vocational, Technical and Adult Education*. Madison: Center for Studies in Vocational and Technical Education, June, 1970.

McCowan, Richard J., and M. Duane Mongerson. *Employment Status and Attitudes of Secondary School Occupational Education Graduates in New York State*. Buffalo: Educational Research and Development Complex, March, 1971.

McKinney, Floyd L. and Charles Oglesby. Developing and Conducting Follow-Up Studies of Former Students. Lexington: Kentucky Research Coordinating Unit, September, 1971.

Michigan Department of Education. Guidelines for Conducting Follow-Up Studies of Vocational and Technical Education. Lansing, Michigan: Division of Vocational Education, 1965.

Moore, Gwendolyn B., Sherry A. Rubinstein, William P. Gorth, Peter E. Schriber. Connecticut Health Occupations Follow-Up Studies: Summary Report. Hartford: Division of Vocational Education, Research and Planning Unit, August, 1977.

Murphy, Joseph F. and Richard W. Howes. A Summary of a Five and Ten-Year Graduate Follow-Up. Hartford: Division of Vocational Education, 1967.

Nelson, J. L., "Follow-Up Study of Graduates." Improving College and University Teaching, XII, No. 2 (Spring, 1964). 111-112.

Nunnery, Michael Y. and Ralph B. Kimbrough, Politics, Power, Polls and School Elections (Berkeley: McCutchan Publishing Co., 1971), p. 72.

O'Conner, Thomas J., Follow-Up Studies in Junior Colleges: A Tool for Institutional Improvement. Washington, D.C.: American Association of Junior Colleges, 1965.

Paul, Krishan K., A Manual for Conducting Follow-up Surveys of Former Vocational Students. Columbus: Ohio State University, 1975.

Pucel, David J., The Minnesota Vocational Follow-Up System: Rationale and Methods. Minneapolis: University of Minnesota, February, 1973.

Richardson, William B. and Joan R. McFadden. An Identification of Employment Patterns of Vocational Graduates of Indiana Secondary Schools. Lafayette: Prudue University, January, 1975.

Sax, Gilbert. Emperical Foundations of Educational Research. New Jersey: Prentice-Hall, Inc., 1968.

Stevenson, W. W., W. D. Frazier, J. L. Harris and R. D. Allen. A Follow-Up Study of Oklahoma Vocational and Technical Education Graduates and Dropouts: 1968-1969 and 1969-1970. Oklahoma City: Division of Research, Planning, and Evaluation, August, 1971.

Thurston, L. L. "Comment." American Journal of Sociology. No. 52 (1946), 39-50.

U.S. Congressional Record, 94th Congress, 2nd Session (1976

Validation Report, Follow-Up of Vocational Graduates, State of Arkansas, 1973-74. Magnolia, Arkansas: Educational Planning and Evaluation Services, July, 1975.